ATTACHMENT "A"

CITY OF INDEPENDENCE, MISSOURI UPPER ADDAIR CREEK SEWER IMPROVEMENTS SCOPE OF SERVICES

Background

This project involves investigative and modeling work to identify and quantify inflow and infiltration experienced in the Upper Adair Creek watershed as indicated on the Upper Adair Creek Project Map. Following identification of source and amount of I/I the project involves assisting the city in developing solutions that will address the I/I experienced in the project area. The project also involves assisting the city in designing a sewer line to replace an existing 8-inch diameter pipeline currently under I-70 west of Noland Road also indicated on the Upper Adair Creek Project Map.

Scope of Services

The following paragraphs provide a description of the work to be performed by Veenstra & Kimm, Inc. (V&K) under this contract.

Task 1.00: PROJECT MANAGEMENT

Task 1.10 Kickoff Meeting

- The Consultant and the City staff will review the project objectives, establish planning assumptions, hydraulic capacity evaluation criteria and develop weighting factors for evaluating improvement scenarios.
- The City will provide the following information to the degree available at the kickoff meeting:
 - As-built drawings of the sewers in the Hawaiian Brothers restaurant neighborhood.
 - CCTV data in the area to be assessed and modeled.
 - Smoke testing data in the area to be assessed and modeled.
 - InfoSewer model of the Adair Creek basin.
 - Manhole inspection records
 - Service request, work order and any other available records with any history of problems experienced.
 - GIS shape file database that includes sanitary sewer attributes
 - Capital improvement project completed in the project area in the past five years.
 - Flow monitoring within the project area and any rainfall data available from the past five years

Task 1.20 Workshops

1.21 - Workshop 1

- The Consultant will present the project workplan, an assessment of existing data and planning assumptions.
- The Consultant will identify additional data required for performing the project and will prepare a gap assessment technical memorandum following this workshop which would outline the data needs, and suggested approach to gathering the additional data.

1.22 - Workshop 2

- The Consultant will present the results of the hydraulic capacity evaluation, discuss the results with the city staff, and review the proposed Capital Improvement Projects (CIPs).
- The Consultant will give a live demonstration of the hydraulic model to the city staff on identified hydraulic deficiencies and get input from the city staff.

- The Consultant will determine if further investigations are necessary to verify the identified hydraulic constrictions based on City staff input.
 - The Consultant will review proposed system improvements that have been analyzed and the impact of the improvements on downstream sewers using the model to illustrate the hydraulic implications.

1.23 - Workshop 3

- The Consultant will present the recommended capital improvements to the city staff.

1.24 - Workshop 4 (Optional upon the direction of the City)

 The Consultant will present the findings of the plan with other interested stakeholders determined by the City.

Task 1.30 Project Management and Administration

- The Consultant will monitor the project budget, schedule, and progress in delivering the specific tasks of the project outlined in the scope.
- The Consultant will maintain regular communication with the City and will provide meeting agendas and progress reports on monthly intervals to discuss the project progress and take meeting minutes.

Task 2.00: DATA GATHERING AND PRELIMINARY INVESTIGATIONS/ANALYSES

Task 2.10 Information Review

 The Consultant will review all available background information provided by the City to include previous project report and the data from the City's prior work in the subbasins, including recent CIP improvements.

Task 2.20 Field Reconnaissance

The Consultant will conduct a detailed on-site reconnaissance of the project area to include observing building construction type and age, above ground structure and facilities in the assessment area, take photos and note features such as downspout, sewer cleanout locations and any features that may potential contribute to I&I or affect sewer performance.

Task 2.30 Alternatives Identification

 The Consultant will develop alternatives that will be considered for inclusion in the Capital Improvement projects.

Task 2.40 Initial Alternatives Evaluation

- The Consultant will evaluate the alternatives for their technical advantages and disadvantages and their ability to achieve the project objectives.
- The Consultant will perform an initial component of cost evaluation for the alternatives considered.
- The Consultant will identify and eliminate alternatives that are not technically suitable or are clearly not
 cost-effective.

Task 2.50 Basin Modeling Refinements

- Consultant will review the pipe attribute data for completeness of the GIS database.
- Consultant will import pipe attribute data into the InfoSewer model.
- Consultant will review the existing flow data, provided by the City, for proper monitor placement.
- Consultant will review the accuracy and integrity of flow and rainfall monitoring data.
- Consultant will process the flow and rainfall monitoring data to identify the dry weather days to be used for model calibration.

- Consultant will process flow data to identify diurnal curves for input into the model.
- Consultant will process the flow and rainfall monitoring data to identify the storm events to be used for model calibration.
- Consultant will review available CCTV data to prepare a summary condition assessment report
 prioritizing pipe segments in need of rehabilitation and integrate into the hydraulic evaluation report.
- Consultant will review dyed-water and smoke testing data to determine sources of inflow that drain to the sanitary sewer system.
- Consultant will prepare a technical memorandum identifying these locations and recommending approaches to the city to disconnect these areas from the sanitary sewer system.
- Consultant will estimate an approximate amount of inflow removed as a result of the removal of inflow sources.
- Consultant will import the 8-inch diameter and 10-inch diameter sewers into the HDR model to expand the model into the Upper Adair Creek basin.
- Consultant will resolve any connectivity issues and review profiles and will attempt to remove anomalies, if necessary.
- Consultant will use the flow and rainfall monitoring data to calibrate the expanded model to key locations in the system utilizing the RTK method or similar approach within the software.
- Consultant will utilize the calibrated model to evaluate hydraulic deficiencies of the system.

Task 2.60 Flow Analysis

- The Consultant will identify the sources of the rainfall induced infiltration and inflow (RDII) and identify rehabilitation projects to target removal of some of the RDII that finds its way into the sanitary sewer system.
- The Consultant will utilize existing closed-circuit television (CCTV) inspections, and smoke testing data in the Adair Creek basin to incorporate condition assessment into the design to be able to remove some of the extraneous infiltration and inflow through simple system rehabilitation measures.
- The Consultant and city staff will develop a targeted and cost-effective RDII removal project.

Task 2.70 Topographic/Boundary Surveys

 McLaughlin Mueller, Inc. will perform topographic and boundary surveys, parcel descriptions and exhibits, informational title work for the project area along with associated deliverables as stated in the proposal submitted and is attached and incorporated in this scope for the Consultant.

Task 2.80 Utility Coordination

- The Consultant will use the process of sending Utility Notices as outlined in the Consultant's proposal to all applicable utility partners on the project.

Task 2.90 Geotechnical and Utility Potholing

- Geotechnology, LLC will conduct the geotechnical services along the proposed pipeline alignment as stated in the attached Proposal submitted and incorporated in this scope for the Consultant.
- The Consultant will utilize available soil borings from earlier projects in the vicinity of our project.
- Badger will conduct potholing of utilities along the pipeline project corridor, as necessary.

Task 3.00: CAPITAL IMPROVEMENT PROJECT DEVELOPMENT

Task 3.10 Data Gap Evaluation

- The Consultant will identify data gaps that will need to be addressed focused on information that will need to be developed by the project team and a determination will be made if there are time critical issues, or if the data gaps are not likely to impact the selection of the preferred alternatives.

Task 3.20 Development of Specific Alternatives

- The Consultant will develop specific alternatives identified during the initial screening of alternatives to include conceptual cost estimates for the alternatives.

Task 3.30 Prioritization of Alternatives

- The Consultant with participation of City staff will select the preferred alternatives based on its ability to meet the design objectives, cost, and other factors.

Task 3.40 CIP Report

 The Consultant will provide a report on the Capital Improvement Projects based on the previous tasks with conceptual budget estimates.

Task 4.00: PRELIMINARY DESIGN - NOLAND ROAD

Task 4.10 Initial Conceptual Design

The Consultant will develop a 10% conceptual design to establish the framework and basic design
parameters for each of the critical elements of the project that will include the preliminary layout, sizing,
and profile of proposed improvements.

Task 4.20 Initial Basis of Design Report

 The Consultant will develop the initial draft of the Basis of Design report based on the 10% Basis of Design report as the outline.

Task 4.30 30% Design and Preliminary Plans

The Consultant will incorporate the identification and resolution of outstanding issues from the 10% conceptual design process and provide the 30% preliminary design.

Task 4.40 30% Design Submittal

- The Consultant will incorporate elements of the preliminary Basis of Design report as well as review comments from the preliminary design and will prepare and submit 30% design plans to the city.

Task 5.00: FINAL DESIGN - NOLAND ROAD

Task 5.10 Final Design Plans and Specifications

- The Consultant will prepare final design plans and specifications which will involve 60% plans, 90% plans and the final 100% design completion.
- The Consultant will finalize easement, permit and right-of-way documents.

Task 5.20 Final Design Submittals

- The Consultant will submit final design plans, specifications, and estimates.
- Submittals in this task will include the Final Basis of Design report and plans and specifications for each final design stages.
- The Consultant will present supporting information developed during the preliminary and final designs
 as part of the final basis of design report and any supplemental information will be provided to the city.
 This task includes the review and comment phase on the final design phases by the city.

Task 6.00: PUBLIC OUTREACH - NOLAND ROAD

Task 6.10 Public Outreach Program

- The Consultant will assist the City in holding one public meeting for the sanitary sewer main relocation from under I-70 to under Noland Road.

- The Consultant will conduct public outreach with specific property or business owners as needed.
- The Consultant will coordinate with City staff and the City's Public Information Officer to provide information for public information sources as determined by the City.

Task 6.20 Construction Notification and Outreach

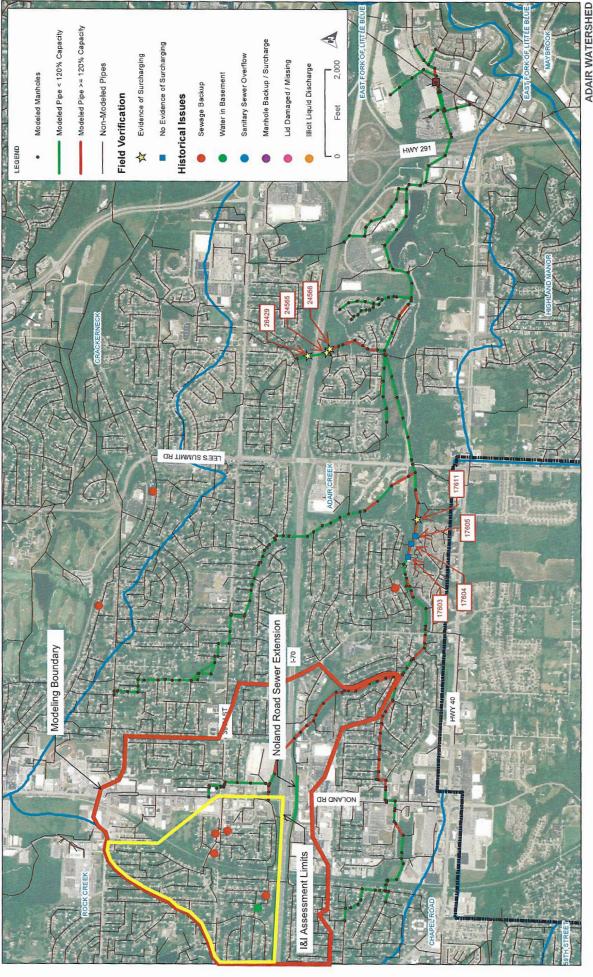
- The Consultant will conduct construction notification and outreach as determined by the City.

Not Included in Project Scope

 Design of the Excess Flow Holding Basin (EFHB) is not included in this phase and will be designed through a supplemental agreement to the initial contract.

A scoping meeting was held between V&K and the City staff where the City agreed to provide data, documents and information for sanitary sewer flow and rainfall monitoring, CCTV data, dye testing, smoke testing data and manholes inspection data. The City also agreed to provide any additional data if needed by the Consultant for these items if not previously available. Therefore , the following items are not included in the scope and fee to be performed by the Consultant.

- Flow and rainfall monitoring
- CCTV Data
- Dye Testing Data
- Smoke Testing Data
- Manhole Inspection Data



ADAIR WATERSHED INDEPENDENCE, MO

McLaughlin Mueller, Inc.

Professional Land Surveyors 218 West Mill Street Liberty, MO 64068 Phone: 816-407-0002 Fax: 816-407-0003

February 15, 2023

Scott M. McDonald, PE Veenstra & Kimm, Inc. 1201 West College, Suite 100 Liberty, MO 64068

Re:

Surveying Services for Upper Adair Creek Sanitary Sewer Improvements Independence, Jackson County, Missouri

SCOPE OF SERVICE

Introduction

Provide survey information for the Engineer to design sanitary sewer improvements.

Vertical Control

The vertical datum will be NAVD 1988 datum. Elevations will be established on horizontal control points. All elevations will be provided in U.S. Feet.

Horizontal Control

The horizontal datum will be based on Missouri State Plane Coordinates, 1983 West Zone. Established from a known monument from the Missouri Geographic Reference System. Coordinates will be converted to ground coordinates using the Grid Factor published on the Missouri Geographic Reference System report. All measurements will be provided in U.S. Feet. Horizontal control points will be established along the project corridor. Horizontal control points will be referenced and described on drawing.

Topography

Provide a detailed topographic survey of the area outlined in red shown on the project survey limits map, approximately 2,660 lineal feet of topography. Topography will include but is not limited to edge of pavements, surface elevations, driveways, trees, bushes, culverts, flower gardens, sidewalks, decks, building faces, power poles, telephone poles, fences, utilities, storm water structures, sanitary sewer structures, gas lines, telephone lines, telephone boxes, cable TV lines, power lines, water mains, fire hydrants, valves, water service lines (tap, curb stop, meter well) and other visible improvements within the survey limits.

Utilities

Contact One-Call system a maximum of one time and request that they provide field marks of existing utilities for the project area. If not marked in the field, utilities may be shown from available mapping. Locate sanitary and storm structure and provide invert elevations.

Property Lines

Locate an adequate number of existing property corner monuments to establish the right-of-way lines and property lines for the properties, within the survey limits. Obtain mapping from Jackson County to reference the collected survey data. List property owner names on drawing from Assessor's GIS.

Descriptions and Exhibits

Prepare one permanent and one temporary descriptions with exhibit per Parcel for an estimated 10 Parcels. Description and exhibits will be invoiced at \$440.00 per Parcel.

Informational Title Work

GTR reports can be ordered from Alpha Tile for \$145.00 per Parcel.

Deliverables

- 1. Provide basemap drawing of topography showing existing structures, right-of-way lines, property lines, visible utilities, marked utilities or if not marked from mapping, horizontal and vertical control points and legend for blocks and 1 foot contours.
- 2. Digital files will be in AutoCAD Civil3D.
- 3. One reproducible plan of the survey signed by a registered Land Surveyor.

Basemap Fee \$37,720.00 Estimated Description and Exhibit Fee \$4,400.00 Estimated GTR Report Fee \$1,450.00

Thank you for this opportunity to provide you with this scope of services. McLaughlin Mueller, Inc. is a Licensed and Insured Company, certificates are available upon request. Please call if you have any questions.

McLaughlin Mueller, Inc. Martin Mueller, PLS President





February 10, 2023

Mr. Scott McDonald, P.E., ENV SP Veenstra & Kimm, Inc. 1201 West College, Suite 100 Liberty, Missouri 64068

Re:

Proposal for Geotechnical Services Sewer Improvements Upper Adair Creek Sanitary Sewer Improvement Independence, Missouri Geotechnology Proposal No. P042878.01

Dear Mr. McDonald:

Geotechnology, LLC (Geotechnology) is pleased to submit this proposal to perform a geotechnical exploration for the referenced project. This proposal has been prepared based on review of your email request for proposal on February 3, 2023, additional information provided in subsequent emails between you and the undersigned, and our local experience.

1.0 PROJECT INFORMATION

The overall project consists of further improvement of a portion of the Independence Upper Adair Creek Sanitary Sewer, along I-70 and South Noland Road. Development plans includes sewer improvements. The sewer will extend approximately 2,650 feet along I-70 to connect into an existing sewer. The extent of the improvements has not yet been finalized; however, improvements are anticipated to include a new sewer on the south side of I-70 from approximately 1,100 feet west to 1,550 feet east of Noland Road.

2.0 SCOPE OF SERVICES

Veensta & Kimm Inc. requested a scope of services that includes two geotechnical borings, possibly a third that is closer to the creek. Further discussion of the proposed scope of services is presented herein.

2.1 Coordination and Field Exploration Considerations

- Geotechnology will approximately locate the borings by measuring distances from site features.
- We request that private utilities be located prior to drill rig mobilization.
- Geotechnology can provide subsurface utility surveying services to assist in locating underground private utilities in the vicinity of proposed boring locations, if requested.



 Geotechnology will obtain the required right-of-way permit from the Missouri Department of Transportation (MoDOT).

2.2 Field Exploration

- Traffic control will be provided to facilitate loading/unloading the drill rig on the ramp shoulder.
- Borings will be planned outside of pavements areas. The borings will be advanced to a depth of 25 feet. We have budgeted rock coring for up to 10 lineal feet per boring.
- A full-time geologist or engineer will be on site during drilling to oversee and manage the sample collection and soil/bedrock identification process, provide direction during exploration, prepare boring logs of the material encountered, and transport samples to our laboratory for further testing.
- Soil samples will be collected using split-barrel sampling techniques at 5-foot intervals.
 SPTs will be performed with an automatic hammer with measured efficiency.
- Soil samples will be classified in general accordance with the Unified Soil Classification System (USCS).
- Groundwater, if present, will be measured during borehole advancement and after completion of drilling.
- The borings will be backfilled with auger cuttings. Excess cuttings will be spread near the borehole.

Drill rig access to boring locations in unpaved areas might leave ruts in the soil or grass. Our scope does not include restoration of ruts, repair of cracked sidewalks or other disturbances caused by the drill rig.

2.3 Laboratory Testing

Laboratory testing will include moisture content determination. Photographs of the rock core, if obtained, will be included in the report.

2.4 Engineering Analyses

A geotechnical report will be prepared under the supervision of a professional engineer registered in the State of Missouri. Geotechnology will summarize the results of borings and laboratory tests in a report in which the following are given:

- Subsurface conditions
 - The results of the borings will be displayed on borings logs
 - Results of the index laboratory tests will be presented on the boring logs
- Site grading recommendations, including:
 - Excavation and potential earthwork difficulties, including soft soil and fill remediation recommendations, if required;
 - Other subgrade support improvements, if required;
 - Fill placement and an evaluation of the suitability for reuse of the on-site soils



- Fill or backfill compaction criteria
- Remediation of subgrade soils with volume change potential, if required
- Groundwater considerations
- Pipe support considerations

A copy of "Important Information about This Geotechnical Engineering Proposal" that is published by the Geoprofessional Business Association (GBA) is enclosed for your review.

3.0 SCHEDULE AND FEE

Coordination of the exploration locations and utility notifications will take four days to complete. The drilling, soil sampling, and clean-up will take one day. Laboratory tests will take one week after completion of the field work, and the report will be submitted approximately two weeks after completion of laboratory testing. Results of the exploration can be discussed throughout the course of the project as the drilling and/or laboratory tests are completed.

Our services as described herein will be performed for a time and material basis for an estimated fee of Twelve Thousand Three Hundred ten Dollars (\$12,310.00). This sum includes mobilization of one drill rig, signage and permitting, drilling and sampling, field geologist/engineer logging, laboratory testing, boring log preparation, and report preparation.

This proposal and fee estimate have been prepared using Geotechnology's standard fee schedule. Geotechnology reserves the right to revise this proposal and fee estimate, at any time, if any flow down and/or contract provisions are required by Client or Owner to conform with any local, state or federal wage act requirements, including but not limited to the Davis-Bacon Act, as Amended, the McNamara-O'Hara Service Contract Act, etc., the required use of union labor, or for any required safety, security, vehicle, drug and alcohol testing, or any third party payment fees, or other requirements not specified in the Client's request for proposal or not defined in Geotechnology's scope of services.

4.0 ACCEPTANCE

If this proposal, including the contractual terms, is acceptable please sign in the space provided on the following Terms and return one executed copy of the Terms and this proposal to our office as your authorization for us to proceed.

* * * * * *



We appreciate the opportunity to submit this proposal for the referenced project and look forward to hearing from you soon. If you have a question or comment concerning this proposal, or if we may be of another service to you, please contact the undersigned.

Very truly yours,

GEOTECHNOLOGY, LLC

Sheryl D. Gallagher, P.E., D.GE

Principal Engineer

RAW/SDG: sdg

Enclosures: Fee estimate

GBA's Important Information about This Geotechnical Engineering Proposal

Terms for Geotechnology's Services



Fee Estimate Geotechnical Services Upper Adair Creek Sewer Improvements I-70 and Noland Road Independence, Missouri

				Proposal
Geotechnical Drilling	Quantity	Quote	Units	Totals
Drill Manager	2	\$153.00	Hour	\$306.00
Mobilization	1	\$736.00	Lump Sum	\$736.00
ATV Daily Rate	2	\$180.00	Day	\$360.00
HSA Drilling	45	\$14.00	Foot	\$630.00
Split Spoon Samples	9	\$18.00	Each	\$162.00
Rock Core Set-Up	3	\$120.00	Each	\$360.00
NQ Coring	30	\$50.00	Foot	\$1,500.00
Support Truck/Fuel Surcharge	2	\$187.00	Day	\$374.00
Stand-By/Move Time	2	\$225.00	Hour	\$450.00
			Subtotal	\$4,878.00

				Proposal
Engineering Field/Coordination	Quantity	Unit Fee	Units	Totals
Senior Project Manager	4	\$173.00	Hour	\$692.00
Engineer	16	\$88.00	Hour	\$1,408.00
Logger Truck	3	\$66.00	Day	\$198.00
MoDOT Permit	1	\$250.00	Allowance	\$250.00
Traffic Control	1	\$2,750.00	Day	\$2,750.00
			Subtotal	\$5,298.00

Laboratory	Quantity	Unit Fee	Units	Proposal Totals
Moisture Content	9	\$7.00	Each	\$63.00
Core Photo	3	\$27.00	Each	\$81.00
			Subtotal	\$144.00

				Proposal
Geotechnical Engineering	Quantity	Unit Fee	Units	Totals
Principal Manager	1	\$194.00	Hour	\$194.00
Senior Project Manager	8	\$173.00	Hour	\$1,384.00
Logs	3	\$30.00	Each	\$90.00
CADD Technician	2	\$90.00	Hour	\$180.00
Word Processor A	2	\$71.00	Hour	\$142.00
			Subtotal	\$1,990.00

TOTAL \$12,310.00

The following items were not included in this Fee Estimate:

- 1. Excessive stand-by time on site due to circumstances beyond the control of Geotechnology, Inc.
- 2. Extra or additional services beyond those identified within this proposal.
- 3. Weekend, holiday, and overtime work in excess of the allowances contained herein.

Note: Hourly rates are portal-to-portal, all durations are rounded to the nearest hour. Environmental issues are not included in this estimate, if encountered the drilling crew will stop work, the project manager will inform the client and we will proceed as instructed.

Important Information about This

Geotechnical Engineering Proposal

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Participate in Development of the Subsurface Exploration Plan

Geotechnical engineering begins with the creation of an effective subsurface exploration plan. This proposal starts the process by presenting an initial plan. While that plan may consider the unique physical attributes of the site and the improvements you have in mind, it probably does not consider your unique goals, objectives, and risk management preferences. Subsurface exploration plans that are finalized without considering such factors presuppose that clients' needs are unimportant, or that all clients have the same needs. Avoid the problems that can stem from such assumptions by finalizing the plan and other scope elements directly with the geotechnical engineer you feel is best qualified for the project, along with the other project professionals whose plans are affected by the geotechnical engineer's findings and recommendations. If you have been told that this step is unnecessary; that client preferences do not influence the scope of geotechnical engineering service or that someone else can articulate your needs as well as you, you have been told wrong. No one else can discuss your geotechnical options better than an experienced geotechnical engineer, and no one else can provide the input you can. Thus, while you certainly are at liberty to accept a proposed scope "as is," recognize that it could be a unilateral scope developed without direct client/engineer discussion; that authorizing a unilateral scope will force the geotechnical engineer to accept all assumptions it contains; that assumptions create risk. Manage your risk. Get involved.

Expect the Unexpected

The nature of geotechnical engineering is such that planning needs to anticipate the unexpected. During the design phase of a project, more or deeper borings may be required, additional tests may become necessary, or someone associated with your organization may request a service that was not included in the final scope. During the construction phase, additional services may be needed to respond quickly to unanticipated conditions. In the past, geotechnical engineers commonly did whatever was required to oblige their clients' representatives and safeguard their clients' interests, taking it on faith that their clients wanted them to do so. But some, evidently, did not, and refused to pay for legitimate extras on the ground that the engineer proceeded without proper authorization, or failed to submit notice in a timely manner, or failed to provide proper documentation. What are your preferences? Who is permitted to authorize additional geotechnical services on your project? What type of documentation do you require? To whom should it be sent? When? How? By addressing these and similar issues sooner rather than later, you and your geotechnical engineer will be prepared for the unexpected, to help prevent molehills from growing into mountains.

Have Realistic Expectations; Apply Appropriate Preventives

The recommendations included in a geotechnical engineering report are *not final*, because they are based on opinions that can be verified only during construction. For that reason, most geotechnical engineering proposals offer the construction observation services that permit the geotechnical engineer of record to confirm that subsurface conditions are what they were expected to be, or to modify recommendations when actual conditions were not anticipated. *An offer to provide construction observation*

is an offer to better manage your risk. Clients who do not take advantage of such an offer; clients who retain a second firm to observe construction, can create a high-risk "Catch-22" situation for themselves. The geotechnical engineer of record cannot assume responsibility or liability for a report's recommendations when another firm performs the services needed to evaluate the recommendations' adequacy. The second firm is also likely to disavow liability for the recommendations, because of the substantial and possibly uninsurable risk of assuming responsibility for services it did not perform. Recognize, too, that no firm other than the geotechnical engineer of record can possibly have as intimate an understanding of your project's geotechnical issues. As such, reliance on a second firm to perform construction observation can elevate risk still more, because its personnel may not have the wherewithal to recognize subtle, but sometimes critically important unanticipated conditions, or to respond to them in a manner consistent with your goals, objectives, and risk management preferences.

Realize That Geoenvironmental Issues Have Not Been Covered

The equipment, techniques, and personnel used to perform a geoenvironmental study differ significantly from those used to perform a geotechnical study. Geoenvironmental services are not being offered in this proposal. The report that results will not relate any geoenvironmental findings, conclusions, or recommendations. Unanticipated environmental problems have led to numerous project failures. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. Do not rely on an environmental report prepared for someone else.

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may be addressed as part of the geotechnical engineering study described in this proposal, the geotechnical engineer who would lead this project is not a mold prevention consultant; none of the services being offered have been designed or proposed for the purpose of mold prevention.

Have the Geotechnical Engineer Work with Other Design Professionals and Constructors

Other design team members' misinterpretation of a geotechnical engineering report has resulted in costly problems. Manage that risk by having your geotechnical engineer confer with appropriate members of the design team before finalizing the scope of geotechnical service (as suggested above), and, again, after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team members' plans and specifications.

Reduce the risk of unanticipated conditions claims that can occur when constructors misinterpret or misunderstand the purposes of a geotechnical engineering report. Use appropriate language in your contract documents. Retain your geotechnical engineer to participate in prebid and preconstruction conferences, and to perform construction observation.

Read Responsibility Provisions Closely

Clients, design professionals, and constructors who do not recognize that geotechnical engineering is far less exact than other engineering disciplines can develop unrealistic expectations. Unrealistic expectations can lead to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their proposals. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks, thus to encourage more effective scopes of service. Read this proposal's provisions closely. Ask questions. Your geotechnical engineer should respond fully and frankly.

Rely on Your Geotechnical Engineer for Additional Assistance

Membership in the Geoprofessional Business Association (GBA) exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit to everyone involved with a construction project. Confer with a GBA-member geotechnical engineer for more information. Confirm a firm's membership in GBA by contacting GBA directly or at its website.



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TERMS FOR GEOTECHNOLOGY'S SERVICES

1 - THE AGREEMENT

- a. This AGREEMENT is made by and between: Geotechnology, LLC, hereinafter referred to as GEOTECHNOLOGY, and Veenstra & Kimm. Inc. hereinafter referred to as CLIENT.
- b. The AGREEMENT between the parties consists of these TERMS, the attached PROPOSAL identified as Proposal No. P042878.01, dated February 10, 2023 and any exhibits or attachments noted in the PROPOSAL. In the event of a conflict between the TERMS and the PROPOSAL, the provisions of the TERMS shall govern unless the PROPOSAL specifically indicates that it is to govern. Together, these elements will constitute the entire AGREEMENT superseding any and all prior negotiations, correspondence, or agreements either written or oral. Any changes to this AGREEMENT must be mutually agreed to in writing.
- c. This proposal is valid for 30 days from February 10, 2023.
- d. The technical pricing information contained in this PROPOSAL submitted by GEOTECHNOLOGY is to be considered confidential and proprietary and shall not be released or otherwise made available to any third party without the express written consent of GEOTECHNOLOGY.
- e. It is intended by the parties to this AGREEMENT that GEOTECHNOLOGY'S services in connection with the project shall not subject GEOTECHNOLOGY'S individual employees, officers or directors to any personal legal exposure for the risks associated with this project. Therefore, and notwithstanding anything to the contrary contained herein, CLIENT agrees that as the CLIENT'S sole and exclusive remedy, any claim, demand or suit shall be directed and/or asserted only against GEOTECHNOLOGY, a Missouri corporation, and CLIENT expressly waives CLIENT's rights against any of GEOTECHNOLOGY'S employees, officers or directors.

2 - STANDARD OF CARE

- a. CLIENT recognizes that conditions may vary from those observed at locations where borings, surveys, observations, or explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by GEOTECHNOLOGY will be based solely on information available to GEOTECHNOLOGY. GEOTECHNOLOGY is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.
- b. GEOTECHNOLOGY offers different levels of services to suit the desires and needs of different clients. Although the possibility of error can never be eliminated, more detailed and extensive services yield more information and reduce the probability of error, but at increased cost. CLIENT has reviewed the scope of services and has determined that it does not need or want a greater level of service than that being provided.
- c. The standard of care for all professional engineering and related services performed under this AGREEMENT will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. GEOTECHNOLOGY makes no warranties, express or implied, under this AGREEMENT or otherwise, in connection with any services performed or furnished by GEOTECHNOLOGY.

3 - SITE ACCESS AND SITE CONDITIONS

- a. CLIENT will grant or obtain free access to the site for all equipment and personnel necessary for GEOTECHNOLOGY to perform the services set forth in this AGREEMENT. CLIENT will notify any and all possessors of the project site that CLIENT has granted GEOTECHNOLOGY free access to the site. GEOTECHNOLOGY will take reasonable precautions to reduce damage to the site, but it is understood by CLIENT that, in the normal course of the services, some damage may occur and the correction of such damage is not part of this AGREEMENT unless so specified in the PROPOSAL.
- b. Unless indicated otherwise in the PROPOSAL, CLIENT is responsible for accurately delineating the locations of all subterranean structures and utilities. GEOTECHNOLOGY will take reasonable precautions to avoid known subterranean structures, and CLIENT waives any claim against GEOTECHNOLOGY arising from damage done to subterranean structures and utilities not identified or accurately located.

4 - CHANGED CONDITIONS

a. If, during the course of performance of this AGREEMENT, conditions or circumstances are discovered which were not contemplated by GEOTECHNOLOGY at the commencement of this AGREEMENT, GEOTECHNOLOGY shall notify CLIENT in writing of the newly discovered conditions or circumstances, and CLIENT and GEOTECHNOLOGY shall renegotiate, in good faith, the terms and conditions of this AGREEMENT.

5 - SAMPLES AND CUTTINGS

- a. GEOTECHNOLOGY will dispose of soil and rock samples ninety (90) days after submittal of the report covering those samples.
 Further storage or transfer of samples can be made at CLIENT'S expense upon CLIENT'S prior written request.
- Cuttings, rinse water, well development and other wastes will be left on site and are CLIENT's responsibility to dispose unless specifically addressed in the PROPOSAL.
- c. CLIENT shall take custody of all monitoring wells, probe holes and borings installed by GEOTECHNOLOGY and shall take any and all necessary steps for the proper maintenance, repair or closure for such wells, probes, or borings at CLIENT'S expense.

6 - OBSERVATION

CLIENT recognizes that unanticipated or changed conditions may be encountered during construction and, principally for this reason, CLIENT shall retain GEOTECHNOLOGY to observe construction when GEOTECHNOLOGY has provided engineering services. CLIENT understands that construction observation is conducted to reduce - not eliminate - the risk of problems arising during construction and that provision of the service does not create a warranty or guarantee of any type. In all cases, contractors shall retain responsibility for the quality and completeness of their work and for adhering to the plans, specifications, and recommendations on which their work is based. Should GEOTECHNOLOGY for any reason not provide construction observation during the implementation of GEOTECHNOLOGY's plans, specifications, and recommendations, or should CLIENT restrict GEOTECHNOLOGY's assignment of observation personnel, CLIENT shall, to the fullest extent permitted by law, waive any claim against GEOTECHNOLOGY, and indemnify, defend, and hold GEOTECHNOLOGY and its affiliated companies harmless from any claim or liability for injury or loss arising from field problems allegedly caused by findings, conclusions, recommendations, plans, or specifications developed by GEOTECHNOLOGY.

If GEOTECHNOLOGY is retained by CLIENT to provide a site representative for the purpose of monitoring specific portions of construction work or other field activities as set forth in the PROPOSAL, then this paragraph applies. For the specified assignment, GEOTECHNOLOGY will report observations and professional opinions to CLIENT. GEOTECHNOLOGY's site representative can be construed as altering any AGREEMENT between CLIENT and others. GEOTECHNOLOGY will report to CLIENT observed conditions related to services for which GEOTECHNOLOGY has been retained to perform which, in GEOTECHNOLOGY's professional opinion, do not conform with plans and specifications. GEOTECHNOLOGY has no right to reject or stop work of any agent of the CLIENT. Such rights are reserved solely for CLIENT. Furthermore, GEOTECHNOLOGY's presence on site does not in any way guarantee the completion or quality of the

work of any party retained by CLIENT to provide field or construction-related services.

GEOTECHNOLOGY shall not be required to sign any document, no matter by whom requested, that would result in GEOTECHNOLOGY having to certify, guarantee, or warrant the existence of conditions whose existence GEOTECHNOLOGY cannot ascertain. CLIENT agrees not to make resolution of any dispute with GEOTECHNOLOGY or payment of any amount due to GEOTECHNOLOGY in any way contingent upon GEOTECHNOLOGY signing any such document.

The use of the word "certify" or "certification" by a registered professional engineer in the practice of professional engineering constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification, and does not constitute a warranty or guarantee, either express or implied. The definition and legal effect of any and all

certifications shall be limited as stated herein.

GEOTECHNOLOGY will strive to perform its construction materials testing services under this AGREEMENT in accordance with generally accepted testing procedures unless other procedures are specifically referenced in the text of the Project plans

and/or specifications.

GEOTECHNOLOGY will provide materials testing for samples specified by CLIENT or at a frequency specified by CLIENT and/or will collect samples for materials testing or conduct materials testing when contacted by the CLIENT. GEOTECHNOLOGY will provide foundation testing and/or television camera inspections on drilled shafts or piles constructed by and at a frequency specified by CLIENT. Engineering evaluation of the suitability of the number or types of samples is not provided by GEOTECHNOLOGY.

Construction materials tests performed by GEOTECHNOLOGY on site are taken intermittently and indicate the general acceptability of materials on a statistical basis. GEOTECHNOLOGY'S tests and observation of materials are not a guarantee of the quality of other parties' work and do not relieve other parties from the responsibility to perform their work in accordance

with applicable plans, specifications and requirements.

7 - JOBSITE

a. Unless specifically set forth in the PROPOSAL, GEOTECHNOLOGY will not be responsible for and will not have control or charge of specific means, methods, techniques, sequences or procedures of construction or other field activities selected by any other person or entity, or safety precautions and programs incident thereto. GEOTECHNOLOGY shall be responsible only for its activities and that of its employees on any site. Neither the professional activities nor the presence of GEOTECHNOLOGY or its employees or its subcontractors on a site shall imply that GEOTECHNOLOGY controls the operations of others, nor shall this be construed to be acceptance by GEOTECHNOLOGY of any responsibility for jobsite safety.

Unless indicated otherwise in the PROPOSAL, GEOTECHNOLOGY'S services under this AGREEMENT are limited to geotechnical engineering, geophysical surveying, drilling, construction materials testing or deep foundation testing and GEOTECHNOLOGY shall have no responsibility to locate, identify, evaluate, treat or otherwise consider or deal with hazardous

c. CLIENT represents that CLIENT has made a reasonable effort to evaluate if hazardous materials are on or near the project site, and that CLIENT has informed GEOTECHNOLOGY of CLIENT's findings relative to the possible presence of such materials.

Hazardous materials may exist at a site where there is no reason to believe they could or should be present. GEOTECHNOLOGY and CLIENT agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. GEOTECHNOLOGY and CLIENT also agree that the discovery of unanticipated hazardous materials may make it necessary for GEOTECHNOLOGY to take immediate measures to protect health and safety. CLIENT agrees to compensate GEOTECHNOLOGY for measures taken to protect health and safety and/or any equipment decontamination or other costs incidental to the discovery of unanticipated hazardous materials.

GEOTECHNOLOGY agrees to notify CLIENT when unanticipated hazardous materials or suspected hazardous materials are encountered. CLIENT agrees to make any disclosures required by law to the appropriate governing agencies. CLIENT also agrees to hold GEOTECHNOLOGY and its affiliated companies harmless for any and all consequences of disclosures made by GEOTECHNOLOGY, which are required by governing law. In the event the project site is not owned by CLIENT, CLIENT recognizes that it is CLIENT's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or

suspected hazardous materials.

CLIENT will be responsible for ultimate disposal of any samples secured by GEOTECHNOLOGY, which are found to be contaminated.

8 - BILLING AND PAYMENT

- a. CLIENT will pay GEOTECHNOLOGY in accordance with the procedures indicated in the PROPOSAL and its attachments. Invoices will be submitted to CLIENT by GEOTECHNOLOGY, and will be due and payable upon presentation. If CLIENT objects to all or any portion of any invoice, CLIENT will so notify GEOTECHNOLOGY in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice not in dispute. The absence of written notification described above, shall constitute an unqualified acceptance of the invoice amount due and payable, and waiver by CLIENT of all claims with respect thereto.
- b. CLIENT recognizes that late payment of invoices results in extra expenses for GEOTECHNOLOGY. GEOTECHNOLOGY retains the right to assess CLIENT interest at the rate of one percent (1%) per month, but not to exceed the maximum rate allowed by law, on invoices which are not paid within thirty (30) days from the date of the invoice. In the event undisputed portions of GEOTECHNOLOGY'S invoices are not paid when due, GEOTECHNOLOGY reserves the right, after seven (7) days prior written notice, to suspend the performance of its services under this AGREEMENT until all past due amounts have been paid in full.
- c. If test results that indicate failure of a material to meet the intended specification require retesting of the material after additional work by parties responsible for that material, the cost of retesting will be invoiced to the CLIENT.
- d. GEOTECHNOLOGY may elect to adjust its rates under this AGREEMENT to account for changes in overhead rates and salary adjustments no sooner than one year from the date of this AGREEMENT, and no more often than once per year at the end of each subsequent year.

9 - TERMINATION

a. This AGREEMENT may be terminated by either party seven (7) days after written notice in the event of any provision of this AGREEMENT or in the event of substantial failure of performance by the other party, or if CLIENT suspends the work for more than three (3) months. Both parties shall have the opportunity to initiate a mutually agreeable remedy for failure of performance within fifteen (15) days after notice of termination. In the event of termination, GEOTECHNOLOGY will be paid for services performed prior to the date of termination plus reasonable termination expenses, including, but not limited to the cost of cleanup, demobilization, completing analyses, records, and reports necessary to document job status at the time of termination.

10 - ALLOCATION OF RISK

10.1 LIMITATION OF LIABILITY

- a. GEOTECHNOLOGY and CLIENT have evaluated the risks and rewards associated with this project, including GEOTECHNOLOGY'S fee relative to the risks assumed, and agree to allocate certain of the risks, so, to the fullest extent permitted by law, the total aggregate liability of GEOTECHNOLOGY to CLIENT and third parties granted reliance is limited to the greater of \$50,000 or GEOTECHNOLOGY'S fee, for any and all injuries, damages, claims, losses, expenses, or claim expenses (including attorney's fees) arising out of GEOTECHNOLOGY'S services or this agreement regardless of cause or causes. Such causes include, but are not limited to, GEOTECHNOLOGY'S negligence, errors, omissions, strict liability, statutory liability, negligent misrepresentation, breach of contract, breach of warranty, or other acts giving rise to liability based on contract, tort or statute. If CLIENT prefers to have higher limits of liability coverage, GEOTECHNOLOGY agrees, upon receipt of CLIENT'S written request at the time of accepting our PROPOSAL, to increase the limits of liability up to a maximum of \$1,000,000.00 at an additional cost of 5 percent of our total fee or \$1,000.00, whichever is greater.
- b. Neither party shall have any liability to the other party for loss of product, loss of profit, loss of use, or any other indirect, incidental, special or consequential damages incurred by the other party.

10.2 INDEMNIFICATION

- a. Subject to the provisions of the Limitation of Liability described in 10.1a. above, CLIENT and GEOTECHNOLOGY each agree to indemnify and hold harmless the other party and the other party's affiliated companies, officers, directors, partners, employees, and representatives, from and against losses, damages, and judgments, including reasonable attorneys' fees and expenses recoverable under applicable law, but only to the extent they are legally determined to be caused by a negligent act, error, or omission of the indemnifying party or any of the indemnifying party's officers, directors, members, partners, agents, employees, or subconsultants in the performance of services under this AGREEMENT. If claims, losses, damages, and judgments are legally determined to be caused by the joint or concurrent negligence of CLIENT and GEOTECHNOLOGY, they shall be borne by each party in proportion to its negligence.
- b. CLIENT shall indemnify and hold harmless GEOTECHNOLOGY, its affiliated companies, agents, subcontractors, directors, officers, and employees, from and against any and all claims, suits, liability, damages, injunctive or equitable relief, expenses, including reasonable attorney's fees or other loss arising from damage to subterranean structures or utilities which were not identified or located by CLIENT to GEOTECHNOLOGY in advance of our work or the discovery of unanticipated hazardous materials or suspected hazardous materials, including, but not limited to, any costs created by delay of the project and any costs associated with possible reduction of the property's value.
- c. For the purposes of this AGREEMENT only, and except as provided under Paragraph 10.2 (a) above regarding the negligent performance of GEOTECHNOLOGY, CLIENT shall reimburse GEOTECHNOLOGY for or otherwise indemnify, defend, and save GEOTECHNOLOGY, its affiliated companies, agents, subcontractors, directors, officers and employees harmless from any and all demands, suits, judgment, expenses, attorney's fees, and losses arising out of or in connection with bodily injury (including death) to persons or damage to property which may arise from the presence or origination of hazardous substances, pollutants, or contaminants on CLIENT'S property, irrespective of whether such materials were generated or introduced before or after execution of this AGREEMENT; provided, however, that nothing hereinabove set forth is intended to shift any responsibility for employee claims that the parties may bear under the Worker's Compensation laws of the state in which the work is to be performed.

d. GEOTECHNOLOGY shall under no circumstances be considered the generator of any hazardous substances, pollutants, or contaminants encountered or handled in the performance of the work. Without contradiction of any assertion by CLIENT or third-party liability as described in Paragraph 10.2 (b) above and for the purposes of this AGREEMENT only, it is agreed that any hazardous materials, pollutants, or contaminants generated or encountered in the performance of the work shall be the responsibility of CLIENT.

11 - CONTINUING AGREEMENT

a. The indemnity obligations and limitations of liabilities established throughout this AGREEMENT, regardless of paragraph number, shall survive the assignment, transfer, expiration or termination of this AGREEMENT.

12 - PREVAILING WAGE AND UNION MEMBERSHIP

a. Unless CLIENT specifically informs GEOTECHNOLOGY in writing or it is specifically identified in our PROPOSAL and/or WORK AUTHORIZATION that prevailing wage regulations or union membership are required for the Project and the Scope of Services identifies it as covered, CLIENT will reimburse, defend, indemnify and hold harmless GEOTECHNOLOGY and its affiliated companies from and against any liability resulting from a subsequent determination that prevailing wage regulations or union membership cover the Project, including all additional costs, fines and attorneys' fees.

13 - THIRD PARTY RELIANCE UPON REPORTS

a. All Documents are prepared solely for use by CLIENT (and Owner, if applicable) and shall not be provided to any other person or entity without GEOTECHNOLOGY'S written consent. CLIENT shall defend, indemnify and hold harmless GEOTECHNOLOGY, its affiliated companies, officers, shareholders and employees, from and against any action or proceeding brought by any person or entity claiming to rely upon information or opinions contained in reports or other documents provided to such person or entity, published, disclosed or referred to without GEOTECHNOLOGY'S written consent.

14 - NON-SOLICITATION OF EMPLOYEES

a. CLIENT recognizes that GEOTECHNOLOGY, as a part of the services covered by this AGREEMENT, may provide one or more of its employees to work with members of CLIENT'S project staff or specifically on a CLIENT'S project. For purposes of this AGREEMENT, an employee of GEOTECHNOLOGY may be a permanent or temporary employee assigned to provide services to CLIENT. CLIENT hereby agrees that CLIENT will not hire, either directly or indirectly, or provide inducement to hire an employee of GEOTECHNOLOGY either as an employee of CLIENT or as an employee of a subcontractor or supplier to CLIENT, such suppliers to include providers of contract labor, during the term of this AGREEMENT and for a period of six months after the termination of this AGREEMENT. Any hiring or inducement to hire any GEOTECHNOLOGY employee during the term of this AGREEMENT and for a period of six months after termination of this AGREEMENT will be subject to a fee equal to 25% of the total fee for services generated by that employee during a nominal 12-month period.

15 - DISPUTES RESOLUTION

- a. All claims, disputes, and other matters in controversy between GEOTECHNOLOGY and CLIENT arising out of or in any way related to this AGREEMENT will be submitted to mediation as a condition precedent to litigation. Notwithstanding any other provision of the Agreement, unless prohibited by law, GEOTECHNOLOGY shall have, in addition to any other right or option set forth herein, the right to proceed in creating a lien upon the building or other improvements and upon the real estate on which the building or improvements are situated for the work and labor done and the labor and materials furnished on and to said real estate and to enforce its mechanic's lien pursuant to all rights and remedies available to it under law.
- b. If a dispute at law arises from matters related to the services provided under this AGREEMENT and that dispute requires litigation, then:
 - (1) the claim will be brought and tried in St. Louis County, Missouri and CLIENT waives the right to move the action to any other county or judicial jurisdiction, and
 - (2) the prevailing party in any arbitration or litigation between GEOTECHNOLOGY and CLIENT shall be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, expert witness costs, and other claim related expenses. For purposes of this paragraph, a party prevails if (i) the judgment is equal to or in excess of the Plaintiff's last written demand for settlement, the Plaintiff shall also be entitled to recover its costs, expenses and reasonable attorney's fees from Defendant; (ii) the judgment is equal to or less than the Defendant's last written offer of settlement, the Defendant shall be entitled to recover its costs, expenses and reasonable attorney's fees from the Plaintiff; (iii) the judgment is in between the Plaintiff's last written demand for settlement and the Defendant's last offer of settlement, then neither party shall recover any of its costs, expenses or attorney's fees from the other.

16 - GOVERNING LAW AND SURVIVAL

- a. The law of the State of Missouri will govern the validity of these TERMS, their interpretation and performance.
- b. If any of the provisions contained in this AGREEMENT are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired.

17 - SUCCESSORS AND ASSIGNS

a. This AGREEMENT shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns. Neither party may assign its interests herein (unless assignee assumes in writing assignor's obligations hereunder) without the prior written consent of the other party, which consent will not be unreasonably withheld. No assignment shall operate to relieve the assignor of its obligations under the AGREEMENT.

18 - OTHER PROVISIONS

- a. It is agreed that this AGREEMENT is entered into by the parties for the sole benefit of the parties to the AGREEMENT, and that nothing in the AGREEMENT shall be construed to create a right or benefit for any third party.
- b. Neither party shall hold the other responsible for damages or delay in performance caused by weather and other acts of God, strikes, lockouts, accidents, or other events beyond the reasonable control of the other or the other's employees and agents.
- c. The titles used in this AGREEMENT are for general reference only and are not part of the AGREEMENT.

19 - FUTURE SERVICES

 All future services rendered by GEOTECHNOLOGY at CLIENT'S request for the project described in the PROPOSAL and/or WORK AUTHORIZATION shall be conducted under the terms of this AGREEMENT.

20 - SIGNATURES

a. The parties have read the foregoing, including any attachments thereto, understand completely the terms, and willingly enter into this AGREEMENT that will become effective on the date signed below by CLIENT.

Veenstra & Kimm, Inc.		Geotechnology, LLC
		Sho Ten
	(Signature)	(Signature)
Ву:	(Print Name)	By Sheryl D. Gallagher, P.E., D.GE (Print Name
Position:		Position: Principal Engineer
Date:		Date: February 10, 2023



CITY OF INDEPENDENCE, MISSOURI UPPER ADAIR CREEK SEWER IMPROVEMENTS PROJECT FEE BREAKDOWN VEENSTRA & KIMM, INC.

PROJECT BREAKDOWN FEE

UPPER ADAIR CREEK SANITARY SEWER MODELING \$179,300

UPPER ADAIR CREEK SANITAIRY SEWER CONNECTION (NOLAND ROAD) \$113,900

PROJECT TOTALS \$293,200

CITY OF INDEPENDENCE, MISSOURI CUPPER ADAIR CREEK SEWER IMPROVEMENTS PROJECT HOURS AND FEE ESTIMATE



Task No	Description	Project Reviev	> ()	Project Pro Manager En	Project De Engineer En	Design Staff Engineer Engir	eer	GIS/CADD Admin Technician Assistant		Total Hours	Labor	Materials	Sub-consultants	TOTAL COST
		9	66	Tm	6	4	90	100	65					
1.00	1.00 PROJECT MANAGEMENT													
1.10	1.10 Kick-off Meeting		-	2	2	-	2			9	884	4		884
1.20	1.20 Workshops													
1.21	1.21 First workshop			2	2	1	2	2	1	10	1293	3 100		139
1.22	1.22 Second Workshop			2	2	1	2	2	1	10	1293	3 100		139
1.23	1.23 Third Workshop			2	2	1	2	2	1	10	1293	3 100		1393
1.24	1.24 Fourth Workshop			2	2	1	2	2	1	10	1293	3 100		1393
1.30	1.30 Project Management and Adminstration	9		24	12	9			4	52	8498	8		8498
	SUBTOTAL	9	0	34	22	10	10	00	00	86	\$14,554.00	0 \$400.00	\$0.00	\$14,954.00
2.00	2.00 DATA GATHERING & PRELIMINARY INVESTIGATIONS													
2.10	2.10 Information Review			4	16	16	16		2	54	7550	0		7550
2.20	2.20 Field Recconissance			2	00	4	00	00		30	3934	4 97		4031
2.30	2.30 Alternative Identification			2	00	80	4	00	2	32	4280	0		4280
2.40	2.40 Initial Alternatives Evaluation			2	00	00	4	4		26	3750	0		375(
2.50	2.50 Basin Modeling Refinements	2	9	18	246	262	270	170		974	130048	8		130048
2.60	2.60 Flow Analysis			2	24	20	20	00		74	10342	2		10347
2.70	2.70 Topographic Surveys*			1	2	4	9	9		19	2257	7 100	43570	4592
2.80	2.80 Utility Coordination			1	2	9	9	4	2	21	2475	5 100		257
2.90	2.90 Geotechnical and Utility Potholing**			1	2	4	4	4		15	1877	7 100	19810	21787
	SUBTOTAL	2	9	33	316	332	338	212	9	1245	\$166,513.00	00.795\$ 0	\$63,380.00	\$230,290.00
3.00	3.00 CAPITAL IMPROVEMENT PROJECTS DEVELOPMENT													
3.10	3.10 Data Gap Evaluation	2		2	4	2	4	1	2	17	2358	80		2358
3.20	3.20 Development of Specific Alternatives		1	2	4	4	4	2		17	2417	7		2417
3.30	3.30 Prioritization of Alternatives			1	2	1	2	1		7	965	5		962
3.40	3.40 Capital Improvement Projects Report		1	2	2	1	4	2	4	16	1867			1867
	SUBTOTAL	2	2	7	12	00	14	9	9	57	\$7,607.00	0 \$0.00	\$0.00	\$7,607.00
1.00	4.00 PRELIMINARY DESIGN - NOLAND ROAD													
4.10	4.10 Initial Conceptual Design		2	2	4	9	9	00		28	3684	4		3684
4.20	4.20 Initial Basis of Design Report			1	2	2	2	2	2	11	1339	6		1339
4.30	4.30 30% Design and Preliminary Plans	2	2	2	80	20	16	24	1	75	9419	9 200		9919
4.40	4.40 30% Design Submittal		1	2	2	2	2	4	2	15	1901			1901
	SUBTOTAL	2	5	7	16	30	26	38	5	129	\$16,343.00	0 \$500.00	\$0.00	\$16,843.00
5.00	5.00 FINAL DESIGN - NOLAND ROAD													
5.10	5.10 Final Design Plans and Specifications	2	4	4	16	24	20	40	2	112	14256	9 200		14756
5.20	5.20 Final Design Submittals		2	2	4	2	4	12	2	28	3458			3458
	SUBTOTAL	2	9	9	20	26	24	52	4	140	\$17,714.00	0 \$500.00	\$0.00	\$18,214.00
6.00	6.00 PUBLIC OUTREACH - NOLAND ROAD													
6.10	6.10 Public Outreach Program			4	4	2	2	4	4	20	2536			2736
6.20	6.20 Construction Notification and Outreach			4	4	2		4	4	18	2356	5 200		2556
	SUBTOTAL	0	0	80	8	4	2	00	∞	38	\$4,892.00	0 \$400.00	\$0.00	\$5,292.00

^{*} Sub-Consultant services include topograpic and legal survey including easement descriptions and title work. (Easement and Title work Allowance is \$5,850)
** Sub-Consultant services include geotechnical services and utility pothiling. (Potholing allowance in \$7,500)

VEENSTRA & KIMM, INC.