

Work Authorization # 07
Vance, Vale, and Bettis Waterlines Replacement
KFA PROJECT # 0764
City of Rollingwood General Engineering Services

This work authorization is made pursuant to the terms and conditions of the original Professional Service Agreement dated November 16, 2020, by and between K Friese & Associates, Inc. and the City of Rollingwood

SERVICES PROVIDED BY K FRIESE & ASSOCIATES, INC.:

Refer to Attachment A for details.

DELIVERABLES: Refer to Attachment A for details.

DURATION:

This Agreement shall remain in effect until July 1, 2023, unless terminated as provided herein, or extended by mutual agreement in writing. This Agreement is subject in all respects to the Terms and Conditions attached hereto and incorporated herein by reference.

BUDGET: Time and materials not to exceed **\$188,355.13**: Refer to Attachment B for details.

CLIENT:

CITY OF ROLLINGWOOD

K FRIESE & ASSOCIATES, INC.

SIGNED: _____

SIGNED: _____

TYPED NAME: Amber Lewis

TYPED NAME: Thomas M. Owens, P.E.

TITLE: City Administrator

TITLE: Executive Vice President

DATE: _____

DATE: _____

Attachments:

Attachment A – Scope

Attachment B – Fees

ATTACHMENT A – SCOPE OF SERVICES
CITY OF ROLLINGWOOD
VANCE, VALE, AND BETTIS WATERLINES REPLACEMENT

PROJECT DESCRIPTION

The City of Rollingwood has experienced numerous waterline breaks in the northeast portion of the City's water system, and has determined that the existing lines need to be replaced. The Vance, Vale, and Bettis Waterlines Replacement project consists of approximately 4,000 linear feet of proposed 8-inch potable water pipeline to replace existing 4- and 6-inch diameter water mains in the following locations:

- Vance Lane – from Riley Road to Vale Street
- Vale Street – from Vance Lane to Rollingwood Drive
- Bettis Boulevard – from Riley Road to Vale Street
- Rollingwood Drive – from Vale Street to Timberline Drive

SCOPE OF SERVICES

K Friese + Associates (KFA) will provide engineering services in accordance with the terms and conditions of the Contract, including:

- Preliminary Engineering Services
- Design Phase Services
- Bid Phase Services
- Construction Phase Services

The scope of services to be provided is detailed in the following task descriptions.

1. Preliminary Engineering Services

- 1.1. Project Management - This task includes routine communication with the City, preparation of monthly project status reports; managing subconsultants, manpower, budgets, and schedules; invoicing; implementing and monitoring QA/QC efforts; and other activities associated with managing the project. Anticipated meetings during preliminary engineering include: Project Kickoff Meeting with KFA and key subconsultants to go over the scope of the project; One Progress Meeting with the City during the preliminary engineering phase is anticipated.
- 1.2. Data Collection and Field Visits - KFA will collect available data from various sources including: existing utilities, GIS data, and as-built drawings of roadway/utility improvements. KFA will also perform site visits to identify and locate utility surface features and other potential conflicts to aid in setting the final pipeline alignments.
- 1.3. Environmental and Cultural Resources – Cox|McLain Environmental Consulting, Inc. will provide environmental support for the project as described in their attached Scope of Services.

ATTACHMENT A – SCOPE OF SERVICES
CITY OF ROLLINGWOOD
VANCE, VALE, AND BETTIS WATERLINES REPLACEMENT

- 1.4. Design Survey- CivilCorp will perform a design survey consisting of trees, surface features, property lines and 1-foot topographic lines. See attached Scope from CivilCorp for additional information.
- 1.5. Geotechnical Investigation - Raba Kistner Consultants, Inc. will perform 8 geotechnical borings, each 15-feet deep, along the project route; conduct appropriate laboratory testing; and summarize the field investigation results and bedding, earthwork, and pipe design recommendations in a Geotechnical Report.

2. Design Phase Services

- 2.1. Project Management - This task includes routine communication with the City, preparation of monthly project status reports; managing subconsultants, manpower, budgets, and schedules; invoicing; implementing and monitoring QA/QC efforts; and other activities associated with managing the project. Attendance at 4 Progress Meetings, anticipated to be held monthly with the City Staff.
- 2.2. QA/QC and Constructability Reviews - KFA will conduct both Project Design Team (PDT) and Independent Technical Review Team (ITRT) QA/QC reviews.
- 2.3. Plan Preparation - KFA will prepare construction plans (11"x17" sheets) suitable for public bidding to include notes, plan and profile sheets, details, environmental protection, and traffic control. Plan and profile sheets for pipelines shall be at 1"=40' horizontal and 1"=4' vertical scale. For budgeting purposes, it is estimated that the plans will consist of 30 total sheets.
- 2.4. Contract Documents & Technical Specifications - KFA will develop a Project Manual consisting of Standard Construction Contract Bid Documents and Technical Specifications. Special Provisions to the Standard Technical Specifications and Special Specifications will be developed, if required for the project.
- 2.5. Engineer's Opinion of Probable Construction Cost - Cost estimates will be prepared/updated and submitted with each design submittal, 50%, 100% and Final. The final OPCC will include a tabulated summary of quantities broken down by plan sheets.
- 2.6. Design Submittals - Progress submittals will be provided at the 50%, 100% and Final design phases. 50% and 100% submittals will consist of the following:
 - 3 Plan Sets
 - 3 sets of the Project Manual (Table of Contents only at 50%)
 - Electronic (PDF) Copies of Plans and Specifications
 - Engineer's Opinion of Probable Construction Cost
 - Updated Project Schedule
 - Response to written review comments

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CITY OF ROLLINGWOOD
VANCE, VALE, AND BETTIS WATERLINES REPLACEMENT

The Final Submittal will include:

- One original set of plans
- One original Project Manual
- Electronic copy of plans and Project Manual
- Engineer's Opinion of Probably Construction Cost
- Electronic files (AutoCAD) of the survey, basemap, and proposed pipeline alignments, including geotechnical bore hole locations

2.7. Public Involvement Assistance - KFA will prepare materials for and attend one (1) public meetings to be organized and led by the City during the design phase.

3. Bid Phase Services

3.1. Project Management - This task includes routine communication with the City; managing manpower, budgets, and schedules; invoicing; and other activities associated with managing the project.

3.2. Pre-Bid Conference - KFA will assist the City in conducting one (1) pre-bid conference. KFA will attend the pre-bid and present the project and assist in answering questions.

3.3. Bidder Questions - KFA will assist the City in responding to technical questions received from bidders during the bid phase of the project.

3.4. Addenda - KFA will assist the City in preparing and issuing required Addenda to the bidders. Preparation and issuance of two (2) Addenda has been assumed for budgeting purposes.

3.5. Bid Opening and Award Recommendation - KFA will attend the bid opening, perform all bid tabulation, review bids, perform reference checks, and make an award recommendation to the City.

4. Construction Phase Services

4.1. Project Management - This task includes routine communication with the City; managing manpower, budgets, and schedules; invoicing; and other activities associated with managing the project.

4.2. Conformed Documents - KFA will incorporate addenda items in the construction plans as appropriate and reproduce and distribute the documents.

4.3. Pre-Construction Conference - KFA will attend a pre-construction conference with the City, Contractor, and other parties as appropriate, and prepare the meeting minutes.

ATTACHMENT A – SCOPE OF SERVICES
CITY OF ROLLINGWOOD
VANCE, VALE, AND BETTIS WATERLINES REPLACEMENT

- 4.4. Construction Progress Meetings - KFA will attend regular construction progress meetings with the City, Contractor, and other parties as appropriate, including preparing the meeting minutes. For budgeting purposes, we have assumed 20 meetings to take place twice a month for 10 months.
- 4.5. Site Visits - KFA will visit the site (20 visits) to check the progress of the work and verify general conformance with the project plans and technical specifications.
- 4.6. Submittal Reviews - KFA will maintain a log of all Contractor submittals, track review progress, review and approve submittals, and distribute submittals to the appropriate parties.
- 4.7. Pay Application Review - KFA will review the Contractor's pay applications (10) after approval by the on-site Inspector and make recommendations for payment.
- 4.8. Change Orders - KFA will review all Contractor's requests for Change Orders and prepare Change Orders as appropriate. For budgeting purposes we have assumed two (2) change orders.
- 4.9. Requests for Information - KFA will provide answers to requests for information (RFI's) from Contractor as related to possible conflicts and clarifications needed between plans and specifications. Four (4) RFI's have been assumed.
- 4.10. Contract Close-Out – KFA will attend a final project walk-through, document “punch list items,” and issue an Engineer's Concurrence for Project Acceptance letter. KFA will also notify TCEQ and other jurisdictional agencies of project completion.
- 4.11. Record Drawings – KFA will use the Contractor's redline as-built drawings to document as-built conditions in the final record drawings. KFA will supply the City with one set of reproducible record drawings and provide one set of record drawings in electronic format.

GENERAL ASSUMPTIONS

1. No proposed easements are expected for the project.
2. Utility relocations for water and wastewater utilities will be limited or not required. No relocations of dry utilities are included.
3. Subsurface utility engineering (SUE) is not included in this scope.
4. Impacts to regulated floodplains are not anticipated.
5. All review, inspection, and permit fees will be paid for directly by the Owner.
6. Owner will provide to KFA all data in Owner's possession relating to KFA's services on the Project. KFA will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by the Owner.

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7. Owner will give prompt notice to KFA whenever Owner observes or becomes aware of any development that affects the scope or timing of KFA's services.
8. The Owner shall examine information submitted by KFA and render in writing or otherwise provide comments and decisions in a timely manner.

Attachment B - KFA MANPOWER/BUDGET ESTIMATE
CITY OF ROLLINGWOOD GENERAL ENGINEERING SERVICES
VANCE, VALE, AND BETTIS WATERLINES REPLACEMENT

Date: 11/11/2021

		Hourly Bill Rate	\$ 260.00	\$ 205.00	\$ 178.00	\$ 106.00	\$ 114.00	\$ 85.00	Subconsultants					
Task	Quality Manager Hours	Senior Project Manager Hours	Project Engineer Hours	EIT Hours	Senior CADD Operator Hours	Clerical Hours	Total Labor Hours	Total Labor Cost	CivilCorp Cost	Raba Kistner Cost	Cox McLain Cost	Expenses Cost	Total Cost	
A PRELIMINARY ENGINEERING SERVICES														
1	Project Management		8				2	10	\$1,810.00				\$0	\$1,810.00
2	Data Collection and Site Visits		1	2	4	4		11	\$1,441.00				\$0	\$1,441.00
3	Environmental and Cultural Resources		1	2	2			5	\$773.00		\$10,892		\$0	\$11,665.00
4	Design Survey		1	2	2	4		9	\$1,229.00	\$58,083			\$0	\$59,312.13
5	Geotechnical Investigation		1	2	2			5	\$773.00		\$13,500		\$0	\$14,273.00
Task A Subtotal		0	12	8	10	8	2	40	\$6,026.00	\$58,083.13	\$13,500.00	\$10,892.00	\$0	\$88,501.13
B DESIGN PHASE SERVICES														
1	Project Management		20					4	24	\$4,440.00			\$0	\$4,440.00
2	QA/QC and Constructability Reviews	8							8	\$2,080.00			\$0	\$2,080.00
3	Plan Preparation		20	48	96	48			212	\$28,292.00			\$0	\$28,292.00
4	Contract Documents and Technical Specifications		8	20	32				60	\$8,592.00			\$0	\$8,592.00
5	Engineer's Opinion of Probable Construction Cost		4	8	16				28	\$3,940.00			\$0	\$3,940.00
6	Design Submittals		2	4	8				14	\$1,970.00			\$0	\$1,970.00
7	Public Involvement Assistance		2	4	4				10	\$1,546.00			\$0	\$1,546.00
Task B Subtotal		8	56	84	156	48	4	356	\$50,860.00	\$0.00	\$0.00	\$0.00	\$0	\$50,860.00
C BID PHASE SERVICES														
1	Project Management		12	8				4	24	\$4,224.00			\$0	\$4,224.00
2	Pre-Bid Conference		1	2	2				5	\$773.00			\$0	\$773.00
3	Bidder's Questions		2	4	4				10	\$1,546.00			\$0	\$1,546.00
4	Addenda		2	4	8				14	\$1,970.00			\$0	\$1,970.00
5	Bid Opening and Award Recommendation		1	4	8				13	\$1,765.00			\$0	\$1,765.00
Task C Subtotal		0	18	22	22	0	4	66	\$10,278.00	\$0.00	\$0.00	\$0.00	\$0	\$10,278.00
D CONSTRUCTION PHASE SERVICES														
1	Project Management		16	8				12	36	\$5,724.00			\$0	\$5,724.00
2	Conformed Documents		1	2	4				7	\$985.00			\$0	\$985.00
3	Pre-Construction Conference		1	2	2				5	\$773.00			\$0	\$773.00
4	Construction Progress Meetings (20)		8	20	12				40	\$6,472.00			\$0	\$6,472.00
5	Site Visits (40)		8	40	32				80	\$12,152.00			\$0	\$12,152.00
6	Submittal Reviews		2	8	16				26	\$3,530.00			\$0	\$3,530.00
7	Pay Application Reviews (10)		2	6	8				16	\$2,326.00			\$0	\$2,326.00
8	Change Orders (2)		1	2	2				5	\$773.00			\$0	\$773.00
9	Requests for Information (4)		2	4	6				12	\$1,758.00			\$0	\$1,758.00
10	Contract Close-Out		2	4	4				10	\$1,546.00			\$0	\$1,546.00
11	Record Drawings		1	4	8	8			21	\$2,677.00			\$0	\$2,677.00
Task D Subtotal		0	44	100	94	8	12	258	\$38,716.00	\$0.00	\$0.00	\$0.00	\$0	\$38,716.00
Project Totals		8	130	214	282	64	22	720	\$105,880.00	\$58,083.13	\$13,500.00	\$10,892.00	\$0.00	\$188,355.13

City of Rollingwood
Vance, Vale, and Bettis Waterline Replacement
Design, Bid, & Construction Schedule

ID	Task Name	Duration	Start	Finish	2022												2023											
					Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun					
1	Rollingwood Vance, Vale, and Bettis Waterline Replacement	76 wks	Mon 1/3/22	Fri 6/16/23																								
2	NTP	0 wks	Mon 1/3/22	Mon 1/3/22																								
3	Preliminary Engineering Services	9 wks	Mon 1/3/22	Fri 3/4/22																								
4	Kick-off Meeting	1 wk	Mon 1/3/22	Fri 1/7/22																								
5	Data Collection & Field Visits	4 wks	Mon 1/10/22	Fri 2/4/22																								
6	Environmental Report	4 wks	Mon 1/10/22	Fri 2/4/22																								
7	Geotech Report	6 wks	Mon 1/10/22	Fri 2/18/22																								
8	Design Survey	8 wks	Mon 1/10/22	Fri 3/4/22																								
9	Design Phase	17 wks	Mon 3/7/22	Fri 7/1/22																								
10	50% Phase	9 wks	Mon 3/7/22	Fri 5/6/22																								
11	50% Design/ Specs	6 wks	Mon 3/7/22	Fri 4/15/22																								
12	QA/QC & Reproduction	1 wk	Mon 4/18/22	Fri 4/22/22																								
13	50% Submittal to COR	0 wks	Fri 4/22/22	Fri 4/22/22																								
14	COR Review	2 wks	Mon 4/25/22	Fri 5/6/22																								
15	100% Phase	5 wks	Mon 5/9/22	Fri 6/10/22																								
16	100% Design/Specs	3 wks	Mon 5/9/22	Fri 5/27/22																								
17	QA/QC & Reproduction	1 wk	Mon 5/30/22	Fri 6/3/22																								
18	100% Submittal to COR	0 wks	Fri 6/3/22	Fri 6/3/22																								
19	COR Review	1 wk	Mon 6/6/22	Fri 6/10/22																								
20	Final Design Phase	3 wks	Mon 6/13/22	Fri 7/1/22																								
21	Final Design/Specs	1 wk	Mon 6/13/22	Fri 6/17/22																								
22	QA/QC & Reproduction	1 wk	Mon 6/20/22	Fri 6/24/22																								
23	Final Submittal to COR	0 wks	Fri 6/24/22	Fri 6/24/22																								
24	COR Final Review and Approval	1 wk	Mon 6/27/22	Fri 7/1/22																								
25	Bid Phase	9 wks	Mon 7/4/22	Fri 9/2/22																								
26	Advertise & Bid	4 wks	Mon 7/4/22	Fri 7/29/22																								
27	Review Bids/ Recommendation	1 wk	Mon 8/1/22	Fri 8/5/22																								
28	Contract Execution	4 wks	Mon 8/8/22	Fri 9/2/22																								
29	Construction	41 wks	Fri 9/2/22	Fri 6/16/23																								
30	NTP	0 wks	Fri 9/2/22	Fri 9/2/22																								
31	Construction	40 wks	Mon 9/5/22	Fri 6/9/23																								
32	As-Builts	1 wk	Mon 6/12/23	Fri 6/16/23																								



ENVIRONMENTAL INVESTIGATIONS – SCOPE OF SERVICES
City of Rollingwood Waterline
For K Friese and Associates
City of Rollingwood

Project Understanding

Cox|McLain Environmental Consulting, Inc. (CMEC) understands that the City of Rollingwood (City) Proposes installation of approximately 4,000 linear feet of small-diameter waterlines within the existing right-of-way of Vance Lane, Hatley Drive, Bettis Boulevard, Pickwick Lane, Rollingwood Drive, Timberline Drive, and Riley Road. A preliminary project location exhibit is attached.

The City has contracted K Friese and Associates (Engineer) to design these improvements. CMEC understands that the project would most likely be developed using local funding and that neither federal funding nor oversight are anticipated. Therefore, CMEC assumes that the environmental investigations would be conducted in accordance with local, state, and federal laws but would not require assessment and documentation per the National Environmental Policy Act.

CMEC proposes to provide the preliminary environmental services listed below. Additional assumptions and exclusions are provided in the following sections.

Environmental Services

CMEC will provide the research, field investigations, and agency coordination to support the tasks discussed below and will present a summary of findings in an Environmental Technical Memorandum.

Select Resource Surveys

Hazardous Materials

CMEC will contract with a third-party vendor to provide a search of regulatory databases associated with known hazardous materials sites. The search will be compliant with the guidelines of ASTM E1537-13. CMEC hazardous materials specialists will supplement the results of the database search with field observations and provide an assessment of the risk for the project to encounter contaminated soil, groundwater, or other media.

Historic Resources, including Archeology

CMEC understands that the project would be subject to the Antiquities Code of Texas. Based on the project's lack of above-ground construction; known resources in the area; and past land use in and adjacent to the project area, CMEC assumes that Antiquities Code compliance would not require an archeological survey or non-archeological historic resource survey. Furthermore, the scope and setting of the project may not require coordination with the Texas Historical Commission. This scope of services provides for a due-diligence review including background research and regulatory assessment to determine the appropriate compliance pathway. A coordination letter to the THC is provided as a separate task that will only be initiated if conditions warrant.

The due-diligence review will include a search of the Texas Archaeological Resources Laboratory (TARL) and Texas Historical Commission (THC) databases to document known archaeological and non-archeological historic sites in the project area. This information will be combined with additional contextual information (e.g., soils, past disturbance, etc.). If a need for archeological or non-archeological historic resource surveys is identified either during project design, review, or coordination, those services could be provided under a separate scope and fee.

Water Resources and Waters of the US

CMEC resource specialists will provide a permit-compliance summary related to federal, state, regional, and local regulations. Compliance commitments will be summarized in the Environmental Technical Memorandum. This scope of services does not provide for associated agency-coordination document or construction-phase services (e.g., notice of intent, aquifer protection plans, SWP3).

CMEC wetland specialists will assess the project area to determine whether potential waters of the U.S. occur on site. Impacts to waters of the U.S. may require authorization under Section 404 of the Clean Water Act. CMEC will delineate the boundaries of waters of the U.S. and quantify potential impacts to determine the appropriate compliance strategy. CMEC assumes that the project impacts would not exceed the limits associated with a Nationwide Permit (NWP), as administered by the US Army Corps of Engineers (USACE)



(i.e., no Individual Permit required). Additionally, CMEC assumes that impacts would not require a Pre-construction Notification. If these or other USACE coordination requirements are identified during project design or development, these services could be provided under a separate scope and fee.

Protected Species Habitat Assessment

CMEC ecologists will assess the project area to determine whether it contains suitable habitat for species protected under state and federal law. This includes potential habitat for various karst-dependent species and Golden-cheeked warblers. CMEC ecologists will consult published data related to species occurrence in the project area and perform research on the project area before conducting field-based habitat assessments. These habitat assessments will include karst species habitat investigations conducted by qualified personnel and completed per current US Fish and Wildlife Service (USFWS) protocols. Karst investigations will not proceed beyond cursory excavations completed using hand tools in 10 minutes or less. Given the location of the proposed project, CMEC assumes that investigations are not likely to discover habitat for karst-dependent species. If such habitat is discovered and additional investigations (e.g., presence absence surveys) or USFWS consultation is required, those services could be provided under a separate scope and fee.

CMEC assumes that the City understands that investigations related to the surface expression of karst habitat does not extend to sub-surface karst features that may provide habitat. If karst voids are accidentally discovered during construction, the City should follow appropriate TCEQ and USFWS regulations and guidance. The project area occurs within the permit area of the Balcones Canyonlands Conservation Plan (BCCP). CMEC assumes that a "Infrastructure Project - Habitat Assessment Application" would be required due to the replacement or update to linear utility equipment within the BCCP Permit area.

Environmental Technical Memorandum

CMEC will prepare an Environmental Technical Memorandum that summarizes the findings of the resource investigations discussed above. The document will include all agency correspondence, field notes, and research materials, as appropriate. CMEC will address comments provided by the Engineer and/or City after their review of the draft deliverable.

Other services not included, though available for additional scope and fee:

- Noise barrier analysis
- Air quality modeling
- Notices, Publication fees
- Right-of-entry coordination
- Public Involvement activity preparation or planning
- Edwards Aquifer Protection Plan
- Expert witness services
- Mitigation planning
- Formal presence/absence surveys for any federally listed species
- Formal or informal consultation with the USFWS under the Endangered Species Act
- Construction phase monitoring or services
- Phase 1, Phase 2, or Phase 3 Environmental Site Assessment for Hazardous Materials
- Environmental Documentation per TxDOT requirements.

Deliverables

CMEC will prepare a THC Coordination Letter and will provide it (after City approval) to the THC for their review. CMEC will provide a draft and final Environmental Technical Memorandum that summarizes the resource assessments discussed above. CMEC will complete the environmental deliverables for a cost not to exceed **\$10,892.00**, as detailed in Exhibit A.

Meghan P. Lind
Associate | Senior Ecologist
Cox|McLain Environmental Consulting, Inc.

PROVIDER NAME: Cox McLain Environmental Consulting, Inc.												K. FRIESE & ASSOCIATES - Rollingwood Waterline		
TASK DESCRIPTION	PROJECT MANAGER	QA/QC REVIEWER	SR ENVL SCIENTIST II	SR ENVL SCIENTIST I	ENVL PROF II	ENVL PROF I	ENVL STAFF II	ENVL STAFF I	ENVL TECH II	ENVL TECH I	ADMIN/CLERICAL		LABOR HOURS & COSTS	
Task 1: Resource Investigations														
Project Management, meetings, communications	1				4						4		9	
Agency Coordination - in person meetings (not included)													0	
Public Involvement (not included)													0	
THC Coordination Letter	1	2	2		8		8				1		22	
Waters of the US Delineation and Impact Assessment			2	6		6	4						18	
Threatened/Endangered Species Habitat Assess.	1		4	10		4	4		8		1		32	
Informal/Formal USFWS Consultation per ESA (not included)													0	
Hazardous Materials Database Search and Analysis		2			8			4		2			16	
Environmental Technical Memorandum, includes BCCP Infrastructure Application		2		12	8		4	4					30	
HOURS SUB-TOTALS	3	6	8	28	28	10	20	8	8	2	6		127	
CONTRACT RATE PER HOUR	\$138.00	\$71.00	\$113.00	\$95.00	\$83.00	\$73.00	\$60.00	\$53.00	\$45.00	\$39.00	\$50.00			
TOTAL LABOR COSTS	\$414.00	\$426.00	\$904.00	\$2,660.00	\$2,324.00	\$730.00	\$1,200.00	\$424.00	\$360.00	\$78.00	\$300.00		\$9,820.00	
% DISTRIBUTION OF STAFFING	2%	5%	6%	22%	22%	8%	16%	6%	6%	2%	5%			
Task 2: THC Coordination														
Regulatory Compliance Letter (no surveys)					4		4						8	
HOURS SUB-TOTALS	0	0	0	0	4	0	4	0	0	0	0		8	
CONTRACT RATE PER HOUR	\$138.00	\$71.00	\$113.00	\$95.00	\$83.00	\$73.00	\$60.00	\$53.00	\$45.00	\$39.00	\$50.00			
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$0.00	\$332.00	\$0.00	\$240.00	\$0.00	\$0.00	\$0.00	\$0.00		\$572.00	
% DISTRIBUTION OF STAFFING	0%	0%	0%	0%	50%	0%	50%	0%	0%	0%	0%			
Labor Subtotal													\$10,392.00	
Direct Expenses (Task 1 Only)														
Lodging/Hotel	day/person		\$80.00										\$0.00	
Lodging/Hotel Taxes/fees	day/person		\$20.00										\$0.00	
Meals	day/person		\$41.00										\$0.00	
Mileage	mile	0	\$0.535										\$0.00	
Standard Postage	letter		\$0.49										\$0.00	
Overnight Mail - letter size	each	0	\$25.00										\$0.00	
Overnight Mail - oversized box	each	0	\$30.00										\$0.00	
Courier Services	each	0	\$25.00										\$0.00	
Photocopies B/W (8 1/2" X 11")	each		\$0.10										\$0.00	
Photocopies B/W (11" X 17")	each		\$0.20										\$0.00	
Photocopies Color (8 1/2" X 11")	each		\$0.50										\$0.00	
Plots (B/W on Bond)	square foot		\$0.50										\$0.00	
Plots (Color on Bond)	square foot		\$1.00										\$0.00	
Hazardous Materials Database Search	search	1	\$500.00										\$500.00	
Geologic Assessment (not included)	report		\$3,000.00										\$0.00	
Archeology Equipment - Backhoe Operator (not included)	day/person		\$1,500.00										\$0.00	
CDs	each		\$1.50										\$0.00	
SUBTOTAL DIRECT EXPENSES													\$500.00	
												SUMMARY		
												SUBTOTAL LABOR		\$10,392.00
												SUBTOTAL NON-LABOR		\$500.00
												TOTAL		\$10,892.00

November 10, 2021

K Friese and Associates
1120 S Capital of Texas Highway, City View 2, Suite 100
Austin, Tx 78746
Attn: Greg Blackburn, P.E.

Re: Fee Proposal for Surveying Services – City of Rollingwood – Water Main Replacement Design Survey

CivilCorp, LLC is pleased to submit this fee proposal for surveying services for the above referenced project. We propose the following scope of work, deliverables, schedule, fee and exclusions for our services.

I. SCOPE OF WORK

CONTROL SURVEY

Control will be set with 1,000-foot maximum spacing between points, including 2 points set beyond the project limits. Control points shall be of material suitable for conditions as determined by a Texas RPLS. A survey control map sheet will be provided in PDF format signed and sealed by a Texas RPLS. Control coordinates will be based on the Texas Coordinate System of 1983 Texas Central Zone (4203), NAD 83 (2011 adjustment Epoch 2010.00) Geoid 18 and NAVD 88 as determined by GPS observations. Control elevations shall be determined by GPS observation and conventional third order level loop.

EXISTING RIGHT-OF-WAY AND PROPERTY LINES

Abstracting will be performed without the use of a title company to gain a determination of the existing right-of-way.

TOPOGRAPHIC SURVEY

The topographic survey shall be within the existing right-of-way as shown on the attached exhibit. Pavement material types will be indicated as determined on the surface. Existing underground utilities will be collected as marked by others per an 811 one call, as well as visible surface features, including trees over 8 inches in diameter. Overhead utilities will be indicated. Gravity sanitary and storm sewers will be located as to top of manholes and inlets, flow line elevations, type, size, and direction of pipes. Water lines will be located by tops of valves, fire hydrants (flush valves) and visible surface features. Cross section of the survey area will be obtained at 50-foot intervals. An existing condition 2-D planimetric topographic survey base map will be provided with text, line types, and feature blocks scaled to be plotted at agreed upon scales

DIGITAL TERRAIN MODEL (DTM)

A three-dimensional surface model or DTM will be created from a TIN which will be based on conventionally collected three-dimensional survey point data including cross sections and other relevant surface elevation points.

II. FEE

The estimated fee for the above mentioned Scope of Work for lump sum payment is **\$ 58,083.13**. See attachment A for delineation of the estimated fee.

Deliverables

1. Copy of ASCII Points in .txt format
2. Control Sheet in PDF format
3. All CAD files including DTM

Schedule

Work will begin 1 week after official notice to proceed is received. The survey is expected to progress as follows:

- Complete Control Survey – Week 1
- Complete Topographic Survey -Weeks 2 through 5
- Complete Existing Right-of-way Survey – Weeks 5 and 6

Exclusions

- Proposed right-of-way deliverables
- Subsurface utility locating
- Right of entry agreements
- Research easements and property owner information of properties adjoining the right-of-way
- Extra work that is not included in our Scope of Work.

If you have any questions or require additional information, please don't hesitate to call me. We are looking forward to working with you on this project.

Very truly yours,

CivilCorp, LLC

K Friese and Associates

Brandon Absher, RPLS
Project Manager

By: _____

Title: _____

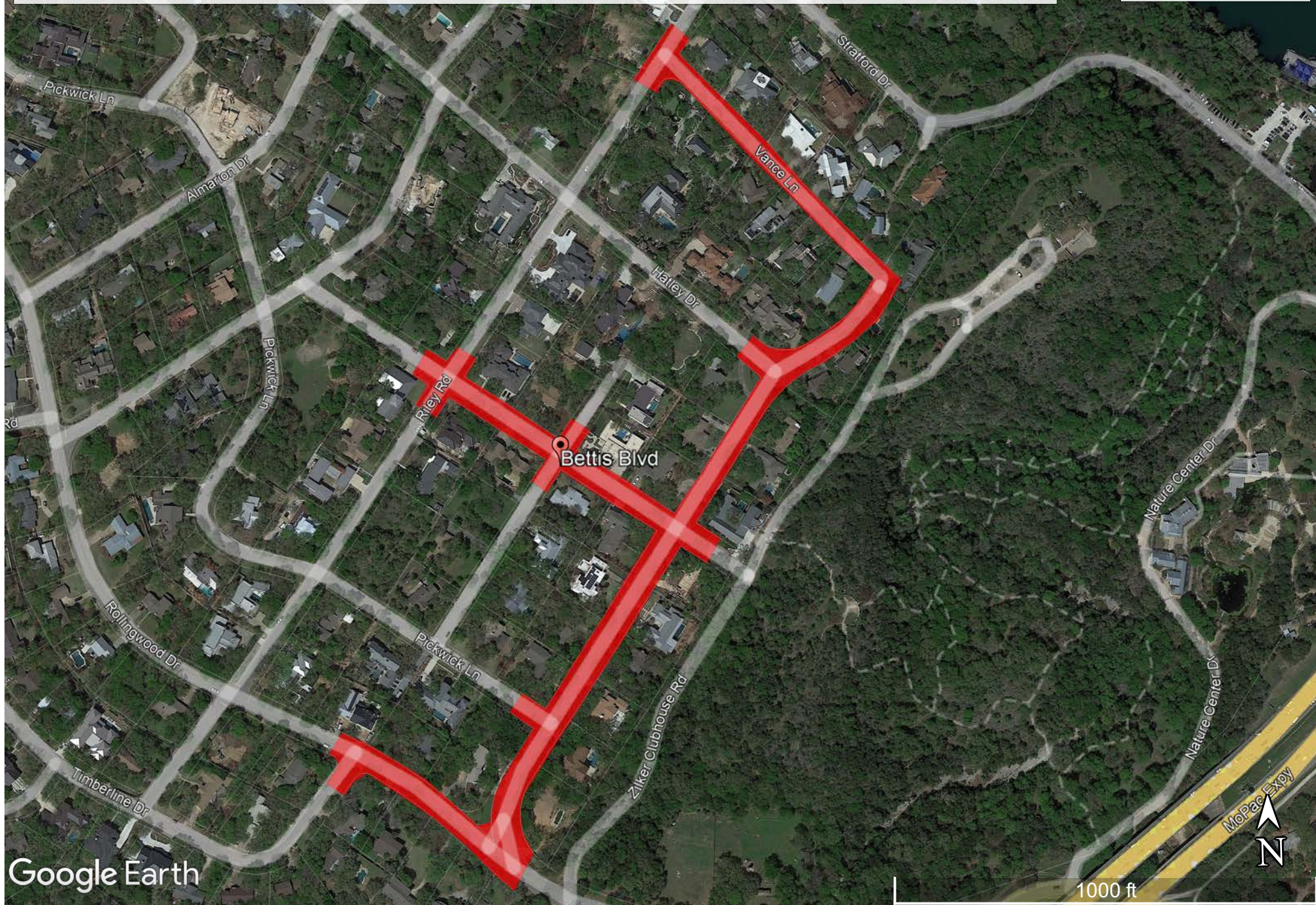
Date: _____

City of Rollingwood - Vance, Vale, & Bettis Water Main Replacements

Survey entire ROW limits of the area shown, including 50-ft in each direction of intersections

Legend

 Survey Limits



Attachment A - Fee Schedule

Method of Payment:

Prime: K Friese and Associates

Project: Vance, vale, and Bettis Water Main Replacement

Subprovider: CivilCorp, LLC. (Surveying Tasks)

Method of Payment: Lump Sum

TASK DESCRIPTION	RPLS-PROJECT MANAGER	SENIOR SURVEY TECH	SURVEY TECH	1-PERSON SURVEY CREW	2-PERSON SURVEY CREW	3-PERSON SURVEY CREW	SENIOR GIS OPERATOR	GIS OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS.	TOTAL TASK COSTS	SHEETS	HOURS PER SHEET
Set Project Control (Estimate 6 control points, 5/8" iron rods with cap)(Includes Texas 811)	2	4	6		20					32	\$ 4,970.00		
Determine Existing Right-of-Way	6	12	24		25		1			68	\$ 9,330.00		
Tie existing utilities marked by 811 one call	2		4		15		1			22	\$ 3,550.00		
Topographic survey - tie Road way at 50' sections and all surface features, includes trees 8" diameter or larger, manholes/inverts, etc.	6	12	24		155		1			198	\$ 32,730.00		
Prepare 2D and 3D deliverables	6	16	24							46	\$ 5,150.00		
Prepare control sheets	3	4	8							15	\$ 1,735.00		
										0			
HOURS SUB-TOTALS	25	48	90	0	215	0	3	0	0	381	\$57,465.00		
CONTRACT RATE PER HOUR	\$165.00	\$110.00	\$100.00	\$130.00	\$180.00	\$215.00	\$120.00	\$95.00	\$90.00				
TOTAL LABOR COSTS	\$4,125.00	\$5,280.00	\$9,000.00	\$0.00	\$38,700.00	\$0.00	\$360.00	\$0.00	\$0.00				
% DISTRIBUTION OF STAFFING	7%	13%	24%	0%	56%	0%	1%	0%	0%				
SUBTOTAL										\$57,465.00			

OTHER DIRECT EXPENSES	UNIT		QUANTITY	NOTES						COST
		MAXIMUM								
Mileage	Mile	\$ 0.575	1075							\$ 618.13
SUBTOTAL DIRECT EXPENSES										\$618.13

SUMMARY	
TOTAL LABOR COSTS	\$57,465.00
NON-SALARY (OTHER DIRECT EXPENSES)	\$618.13
TOTAL	\$58,083.13

[Delivery by Email: gblackburn@kfriese.com]

Proposal No. PAA21-222-00
November 3, 2021

Mr. Greg Blackburn, P.E.
Associate
K Friese + Associates
1120 South Capital of Texas Highway, CityView 2, Suite 100
Austin, Texas 78746

8100 Cameron Road, Suite B-150
Austin, TX 78754

P 512.339.1745
F 512.339.6174
TBPE Firm F-3257

WWW.RKCI.COM

**RE: Proposal for Geotechnical Engineering Study
Rollingwood Waterline Replacement
Vale Street, Rollingwood Drive, Bettis Boulevard, Vance Lane
Rollingwood, Texas**

Dear Mr. Blackburn:

RABA KISTNER Consultants, Inc. (RKCI) is pleased to submit this proposal for Geotechnical Engineering Services for the above referenced project. The broad objectives of our study will be to determine soil conditions at the site and to develop design recommendations and construction guidelines for the proposed water main replacement project in Rollingwood, Texas. Described in this proposal are:

- our understanding of pertinent project characteristics;
- our proposed scope for field and laboratory study;
- our proposed scope for engineering evaluation and reporting;
- our tentative project schedule; and
- our lump sum study cost.

Project Description

Under consideration in this study is waterline replacement at Rollingwood Drive from Timberline Drive to Vale Street, Vale Street from Rollingwood Drive to Vance Lane, Bettis Boulevard from Riley Road to Vance Lane, and Vance Lane from Riley Road to Vale Street in Rollingwood, Texas. The total length of the project is estimated to be 4,000 linear feet. Construction is anticipated to be completed using open cut trench construction. The site is developed and paved with asphalt drives.

Field Study

To explore subsurface soil conditions at this site, RKCI recommends drilling 8 borings to an approximate depth of 15 ft below the existing ground surface utilizing a truck mounted drilling rig as presented on the attached preliminary Boring Location Map.

Samples will be taken using conventional Shelby tube, split-spoon, and NX rock core sampling techniques. The borings will be located in the field utilizing a recreation grade hand-held GPS device. Our scope of service does not include surveying in the boring location. The boreholes will be backfilled with auger cuttings and bentonite and then patched with asphalt.

Water level readings will be recorded for the open boreholes during drilling and at drilling completion. If free water is encountered during drilling, the RKCI geologist will temporarily suspend drilling operations and

Proposal No. PAA21-222-00

November 3, 2021

obtain water level measurements in the open borehole at 5-minute intervals over a 15-minute time period. Water level measurements will also be recorded at completion of drilling prior to backfilling the boreholes with the auger cuttings and spoils generated during the drilling operations.

Samples collected will be retained in our laboratory for 30 days after submittal of the final geotechnical report.

Laboratory Testing

Upon completion of the subsurface exploration, a testing program will be designed to define the strength and classification characteristics of the subgrade soils. The laboratory testing program is anticipated to include moisture content tests, Atterberg Limits (plasticity) tests, unconfined compression tests, and grain size analyses. However, the actual type and number of laboratory tests will be based on the subsurface conditions encountered in the borings. The laboratory testing will be performed in general accordance with applicable ASTM standards.

Engineering Report

The results of the field and laboratory phases of the study will be reviewed by our staff of engineers and geologists. The results of our review, together with the supporting field and laboratory data, will be presented in a written, engineering report. The Geotechnical Engineering Report will include the following information and recommendations, if applicable:

- A boring location map and boring logs;
- A summary of the field and laboratory sampling and testing program,
- A summary of the laboratory test results;
- A review of general site conditions including descriptions of the site, the subsurface stratigraphy, groundwater conditions, and the presence and condition of fill materials, if encountered.
- Pipeline installation considerations, including:
 - pre-installation considerations;
 - excavation equipment;
 - trench safety considerations;
 - open cut trench guidelines;
 - backfill settlement estimations;
 - alternatives to reduce backfill settlement;
 - drainage considerations; and
- Pipeline material specifications.

Our scope of work does not include a geologic fault study nor does it include conducting test pits at the site. Site grading plans can result in changes in the subgrade conditions and alter foundation design recommendations. Final site grading plans will be helpful information in the preparation of our foundation engineering recommendations.

The final report will be produced in a digital PDF and delivered via email.

Proposal No. PAA21-222-00

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Tentative Project Schedule

Based on our present workload and weather permitting, we anticipate that we could begin the field exploration phase of this study within 4 to 5 working days of receiving your written authorization, provided the site is accessible to our truck-mounted drill rig and the Client has supplied us with available information regarding existing utilities and below grade structures on site (if any). The field exploration and laboratory testing phase of the study is expected to take approximately 8 to 7 working days to complete. Engineering analyses and preparation of the engineering report is expected to take an additional two to three weeks to complete. We will be pleased to provide the design team with verbal design information as the data becomes available, once drilling has been completed.

Project Cost

The total lump sum cost for the study scope outlined herein is **\$13,500.00**.

Should unusual soil conditions be encountered in the field that indicates the desirability of significantly broadening the scope of the study, we will contact you to receive authorization before proceeding with any additional work. Additional services will be billed on a unit basis in accordance with our standard fees as indicated on the attached Schedule of Fees for Professional Services.

If available, we request that the Client provide RKCI with a recent plat of the project site, a drawing illustrating existing and proposed construction locations, and preliminary site grading plans prior to the start of our field exploration services. Also, it is our understanding that the Client will provide access to all boring locations for a conventional, truck-mounted drilling rig and that the Client will provide underground utility clearance. RKCI will assist in locating underground utilities, provided the Client submits documentation of existing utility locations. RKCI will take all precautions to prevent damage to property; however, RKCI cannot be responsible for tire rutting, or damage of landscaping.

It should be noted that our study scope and project cost does not include professional time and travel expenses for participation in design team meetings. Furthermore, our estimate does not include professional time for plan review to determine whether the drawings comply with the intent of the geotechnical recommendations.

Acceptance

We appreciate the opportunity of submitting this contract and look forward to working with you in the development of this project, which will be carried out in accordance with this letter and the following attachments:

<u>Attachment</u>	<u>Description</u>
I	Standard Terms and Conditions
II	Schedule of Fees

Proposal No. PAA21-222-00
November 3, 2021

Please return one signed copy of this letter proposal to provide written authorization for our firm to complete work on the services outlined herein. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Texas 75397-1037.

RKCI considers the data and information contained in this proposal to be proprietary. This statement of qualifications and any information contained herein shall not be disclosed and shall not be duplicated or used in whole or in part of any purpose other than to evaluate this proposal.


Very truly yours,

RABA KISTNER CONSULTANTS, INC.


Yvonne Garcia Thomas, P.E.
Vice President

Accepted
By:

Signature


Richard T. Shimono, P.E.
Project Engineer

Typed or Printed Name

RTS/YGT: np
Attachments I & II
Copies Submitted: Above (1)

Title

Date



STANDARD TERMS AND CONDITIONS

1. **DEFINITIONS.**

- 1.1 **RK.** Raba Kistner, Inc., and / or one of its subsidiaries (Project Control of Texas, Inc. or PC Sports, Inc.) that is being engaged to provide the services to CLIENT in connection with the delivery of the proposal to which these Standard Terms and Conditions relate.
- 1.2 **CLIENT.** Person, entity or organization for which RK is rendering services regarding the Project.
- 1.3 **PROJECT.** The activity, venture, plan, building, site or investigation for which CLIENT has engaged RK to provide professional services.
- 1.4 **CONTRACTOR.** Person, entity or organization providing construction services, including labor and material for the Project.
- 1.5 **SERVICES.** The professional services to be performed by RK as set forth in the proposal or Agreement to which the Standard Terms and Conditions are attached.
- 1.6 **AGREEMENT.** RK's proposal accepted by CLIENT and these Standard Terms and Conditions which are incorporated into and made a part of the Agreement.
2. **SERVICES.** RK is being engaged by the CLIENT to render professional services ("Services") involving only RK's advice, judgment and opinion. RK may subcontract all or a portion of the Services performed hereunder. RK shall apply professional judgment in determining the extent to which RK complies with any given standard identified in RK's instruments of professional services. CLIENT expressly acknowledges that RK makes no warranties or guarantees, expressed or implied, regarding the Services.
3. **INFORMATION PROVIDED BY CLIENT.** CLIENT may provide or direct RK to utilize or rely upon certain information ("CLIENT Information") in the performance of RK's services. RK shall be entitled to rely upon such CLIENT Information. RK will not conduct an independent evaluation of the accuracy or completeness of such CLIENT Information and shall not be responsible for any errors or omissions in such information. RK's report, as well as any recommendations, findings, and conclusions made by RK, are dependent on information received from CLIENT. Changes or modifications to the information provided by CLIENT can affect RK's evaluation, recommendations, findings and conclusions, and CLIENT agrees—as a material term of this Agreement—to notify RK immediately, in writing, if CLIENT becomes aware of any such changes or modifications, including changes to the size, scope, location, or other material characteristics of CLIENT's project. The CLIENT shall be responsible for providing

the location of all underground utilities and other structures in the vicinity of RK borings or excavations. RK will not accept responsibility and will not be liable for affecting or damaging any underground utility, underground storage tank, or other subsurface condition not previously identified and located, or improperly located, by the CLIENT, a utility, or a utility locating agency.

4. **SITE ACCESS AND SITE SAFETY.** CLIENT shall provide right-of-entry to the buildings and sites which are the subjects of RK's services. CLIENT represents that it possesses authority for such right-of-entry and that the building/site operator(s) possess the necessary permits and licenses for current activities at the site. RK shall be responsible for supervision and site safety measures of its own employees and subconsultants, but shall not be responsible for the supervision or health and safety precautions of any other parties, including CLIENT, CLIENT's contractors, subcontractors, or other parties present at the site.
5. **SUBSURFACE EXPLORATIONS.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. CLIENT understands RK's layout of boring and test locations is approximate and that RK may deviate a reasonable distance from those locations. RK will take reasonable precautions to reduce damage to the site when performing services; however, CLIENT accepts that invasive services such as drilling, or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the scope of services.
6. **CHANGED CONDITIONS.** If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to RK are uncovered or revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks or other material terms of this Agreement, RK may require renegotiation of appropriate portions of this Agreement. RK shall notify the CLIENT of the changed conditions necessitating renegotiation, and RK and the CLIENT shall promptly and in good faith attempt to renegotiate the terms of the agreement affected by the changed conditions. If changes cannot be agreed to with respect to the changed conditions, the parties shall utilize the Dispute Resolution/Litigation procedures in this Agreement.
7. **TESTING AND OBSERVATIONS.** CLIENT understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. RK will provide test results and opinions based on tests and field observations only for the work tested. CLIENT understands that testing and observation are not continuous or exhaustive and are conducted to reduce – not eliminate – project risk. CLIENT agrees to the level or amount of testing performed and the associated risk. CLIENT is responsible (even if CLIENT delegates such responsibility to Contractor) for notifying and scheduling RK to perform these services. RK shall not be responsible for the quality and completeness of contractor's work or Contractor's adherence to the project plans, specifications and other related documents. RK's performance of testing and observation services shall not relieve Contractor in any way from responsibility for defects discovered in Contractor's work or create a

warranty or guarantee on the part of RK. CLIENT acknowledges that RK will not supervise or direct the work performed by Contractor or its subcontractors and is not responsible for their means and methods.

8. **ESTIMATE OF FEES FOR SERVICES.** If included as part of RK's proposal, RK will, to the best of its ability, perform the scope of services within the proposed fee estimate provided by RK. RK's proposal fees are based upon an estimate of the services required to meet the specifications for the project and following generally accepted engineering practices. The CLIENT recognizes that unforeseen circumstances along with changes in scope and project/contractor's schedules can influence the successful completion of the scope of services within the estimated proposed fees. Because Contractor has sole control over the project and determines the means and methods used to build/construct the project, RK's service fees are estimates and not lump sum or guaranteed maximum fees. The CLIENT is fully responsible for payment for all services provided, including retests of areas or samples that failed to meet Project specifications. The Estimate of Fees is valid for a period of 60 days after RK's proposal is submitted to CLIENT. If RK's proposal is not accepted by CLIENT within 60 days after it is submitted to CLIENT, RK may modify the Estimate of Fees.
9. **REPORTS.** RK may provide CLIENT with written reports in connection with the Services performed. Such reports will present such findings and conclusions as RK may reasonably make with the information gathered while performing its services and provided by CLIENT. The reports may be copied for inclusion in other documents related to the project provided they are reproduced in their entirety. Reports and other instruments of service are prepared for, and made available for, the sole use of the CLIENT, and the contents thereof may not be used or relied upon by others without the express written authorization of RK. Any unauthorized use or distribution of RK's reports shall be at the CLIENT's sole risk and without liability to RK.
10. **TOXIC AND HAZARDOUS MATERIALS.** CLIENT shall provide RK with all information within CLIENT's possession or knowledge related to the potential or presence of toxic or hazardous materials or pollutants at the Project site. CLIENT agrees that RK neither created nor contributed to the creation or existence of any toxic or hazardous materials or pollutants. In no event shall RK be required to sign a hazardous waste manifest or take ownership of any toxic or hazardous materials or pollutants. If unanticipated toxic or hazardous materials or pollutants are encountered while RK is performing its services, RK reserves the right to stop field operations and notify CLIENT and CLIENT assumes responsibility to notify appropriate regulatory agencies. RK and CLIENT must mutually agree to remobilize.
11. **NO THIRD-PARTY BENEFICIARIES.** The services and any report(s) prepared under this Agreement are for the sole benefit and sole use of CLIENT and are not for the use of any other party or person. Only CLIENT may rely upon the services and any report or work product. Nothing in this Agreement, or any subsequent amendments or modifications, or in any report issued under this Agreement, shall create a contractual relationship with or a cause of action in the favor of any third party against either RK or CLIENT. If CLIENT provides a copy of any report prepared by RK to others, it shall advise the recipient that the information contained in the report is provided for information only and is not to be relied upon by third parties.
12. **LEED PROJECTS.** Unless specifically addressed elsewhere in this agreement, RK has no responsibility or liability, including duty to defend or duty to indemnify, any party (including but not limited to CLIENT, owner, owner's agents, architects, engineers, contractors, construction managers, subcontractors) for the LEED certification process including: developing, producing, or retaining any documentation relating to the calculation of LEED points; and attainment of LEED certification points or LEED ratings.
13. **STANDARD OF CARE.** RK shall perform its professional services in accordance with the standard of care and diligence normally practiced by professional firms in performing services of a similar nature, in the same locality, under similar circumstances. CLIENT expressly acknowledges that RK makes no other warranties or guarantees, expressed or implied, regarding its professional services or its work product.
14. **RISK ALLOCATION.** RK will be responsible only for its own work, and that of its sub-consultants, and not for defects in the work designed or built by others.
15. **LIMITATION OF LIABILITY.** CLIENT AND RK HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING RK'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 RK (AND ITS RELATED ENTITIES, EMPLOYEES, OWNERS, AGENTS, AND REPRESENTATIVES) TO CLIENT (AND THIRD PARTIES GRANTED RELIANCE ON RK'S WORK PRODUCT, OR OTHERWISE SEEKING RECOVERY UNDER THIS AGREEMENT) IS LIMITED TO THE GREATER OF \$100,000 OR THE FEE PAID RK UNDER THIS AGREEMENT, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF RK'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY.
16. **CONSEQUENTIAL DAMAGES.** Neither CLIENT nor RK will be liable to the other for any special, consequential, indirect, incidental or penal losses or damages of any kind, nor will CLIENT or RK be liable to the other for losses, damages, or claims, regardless of how defined, related to: lost profits; unavailability of property or facilities; shutdowns or service interruptions; loss of use, revenue, opportunity, or inventory; use charges, carrying costs, cost of substitute facilities, goods, or services; cost of capital, or claims of any other party and/or its customers.
17. **SUSPENSION OF SERVICES.** If CLIENT fails to make payments when due or otherwise is in breach of this Agreement, RK may suspend performance of services upon seven (7) calendar days' notice to CLIENT. RK shall have no liability whatsoever to CLIENT for any costs or damages as a result of such suspension. Upon payment in full by CLIENT, RK may resume services under this Agreement, and the time schedule and compensation shall be equitably adjusted to compensate for the period of suspension plus any other reasonable time and expense necessary for RK to resume performance. Payment of invoices shall not be subject to any discounts or set-offs by CLIENT unless agreed to in writing by RK. Payment to RK for services rendered and expenses incurred will be due and payable regardless of any subsequent suspension or termination of this Agreement by either party. CLIENT shall not make any changes to RK's banking and deposit information or payment instructions unless CLIENT

communicates the requested changes to RK orally and in writing and obtains written confirmation from an RK officer that the requested changes are legitimate and authorized by RK. If CLIENT makes a payment to a third party instead of to RK based on an unauthorized request to CLIENT for a change to RK's banking and deposit information or payment instructions and without obtaining written confirmation of the change from RK, CLIENT will remain liable to RK for payment of the amount of the unauthorized payment.

18. **WAIVER OF SUBROGATION.** To the extent damages are covered by property insurance, or any other available insurance coverage, CLIENT and RK waive all rights against each other and against the contractors, consultants, agents and employees of the other for damages. CLIENT agrees that CLIENT shall procure or cause to be procured builder's risk insurance or other property insurance for its project. RK and CLIENT waive all rights against each other and any of their consultants, contractors, subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, flood, or other causes of loss to the extent covered by CLIENT's or CLIENT's Contractor's builder's risk insurance, or other available insurance coverage. The policies shall provide waivers of subrogation by endorsement or otherwise. CLIENT shall require of its contractors, consultants, agents and employees similar waivers in favor of RK and its subconsultants. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

19. **OWNERSHIP OF DOCUMENTS.** RK's reports, drawings, plans, specifications, and other documents and deliverables are instruments of professional service ("Instruments of Service") developed by RK in contemplation of a wide array of project-specific variables, including how the documents will be used and by whom. RK shall be the author, owner and custodian of the Instruments of Service, and shall retain all common law, statutory, and other reserved rights, including copyright. By execution of this Agreement, RK grants to CLIENT a limited, nonexclusive license to use the Instruments of Service for purposes of constructing, using, and maintaining the project for which the services are performed, provided CLIENT substantially performs its obligations, including prompt payment of all sums when due, under this agreement.

Upon completion of the services, and payment in full of all monies due RK, CLIENT may retain copies of all such documents. **THE INSTRUMENTS OF SERVICE ARE NOT INTENDED NOR REPRESENTED TO BE SUITABLE FOR REUSE ON EXTENSIONS, MODIFICATIONS, OR ADAPTATIONS OF THE PROJECT, OR ANY OTHER PROJECT. ANY REUSE OF SUCH DOCUMENTS, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY RK FOR THE SPECIFIC PURPOSE INTENDED, WILL BE AT CLIENT'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO RK. CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY, DEFEND, AND HOLD HARMLESS RK, ITS OFFICERS, DIRECTORS, EMPLOYEES, AND CONSULTANTS AGAINST ALL CLAIMS,**

DAMAGES, LOSSES, AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES, DEFENSE COSTS, AND COURT COSTS) ARISING FROM, OR ALLEGEDLY ARISING FROM, OR IN ANY WAY CONNECTED WITH, THE UNAUTHORIZED REUSE OR MODIFICATION OF THE DOCUMENTS BY CLIENT OR ANY PERSON OR ENTITY THAT ACQUIRES OR OBTAINS THE DOCUMENTS FROM OR THROUGH CLIENT WITHOUT THE WRITTEN AUTHORIZATION OF RK REGARDLESS OF WHETHER SUCH CLAIMS, DEMANDS, OR ACTIONS ARE FOUNDED IN WHOLE OR IN PART UPON ALLEGED NEGLIGENCE OF RK, ITS OFFICERS, DIRECTORS, EMPLOYEES, OR CONSULTANTS.

Parties other than CLIENT and RK may apply to use an instrument, using a form prepared by RK for that purpose. Others' use of an instrument shall be permitted only when CLIENT and RK both so agree; either shall have the right to forbid use by others. In addition, RK shall make its permission contingent upon the satisfaction of certain conditions when, in RK's professional judgment, such a contingency is necessary.

20. **DISPUTE RESOLUTION/LITIGATION.** All claims, disputes, and other controversies between RK and CLIENT arising out of, or in any way related to, the services provided by RK shall be submitted to mediation, before and as a condition precedent to, other remedies provided by law. Any litigation related to the Agreement or RK's performance of its professional services shall be commenced in a court in Bexar County, Texas. CLIENT consents to personal jurisdiction in the State of Texas and agrees that venue of any litigation shall be in Bexar County, the county where RK's principal place of business is located. CLIENT waives any objection to personal jurisdiction in Texas or to venue in Bexar County. The prevailing party in such litigation will be entitled to recover all court costs, attorneys' fees, and other legally recoverable claim-related expenses. As a condition precedent to mediation and / or litigation related to any claim arising out of the services provided under this Agreement, CLIENT shall obtain a written affidavit from a registered, independent, and reputable professional engineer describing any error, omission or other act by RK that allegedly failed to comply with the professional standard of care applicable to RK's performance of services and provide such affidavit to RK. The affidavit shall comply with the requirements of Texas Civil Practice & Remedies Code Chapter 150.
21. **TERMINATION OF CONTRACT.** CLIENT and RK may terminate RK's services at any time upon ten (10) calendar days' written notice. In the event of termination, CLIENT agrees to fully compensate RK for services performed including reimbursable expenses through the termination date, as well as reasonable demobilization expenses. RK will terminate its services without waiving any claims against or incurring any liability to CLIENT.
22. **STATUTE OF LIMITATIONS.** Any applicable statute of limitations will commence to run and any cause of action shall be deemed to have accrued not later than the earlier of the following: (1) the date of the report issued by RK giving rise to the cause of action; (2) the date on which RK issues its last report under this Agreement; or (3) if RK is retained to perform construction observation, the date of substantial completion of the project.
23. **FORCE MAJEURE.** Neither party shall be liable in damages or have the right to terminate this Agreement for any delay or default in performing hereunder if such delay or default is caused by conditions beyond its control ("Force Majeure") including, but not limited to Acts of God, Government restrictions (including the denial or cancellation of any export or other necessary license), wars, insurrections and/or any other cause beyond the reasonable control of the party whose performance is affected. Force Majeure may not be claimed as a cause for delay in payment of money due and payable hereunder.

24. **NO ASSIGNMENT.** Neither RK nor CLIENT shall assign or transfer its interest in this Agreement without the express written consent of the other.
25. **SEVERABILITY.** Each provision of this Agreement is intended to be severable. If any terms or provisions of this agreement shall be held to be invalid, illegal, or unenforceable for any reason whatsoever, the validity, legality, and enforceability of the remaining provisions hereof shall remain in full force and effect and shall not in any way be affected or impaired thereby. Moreover, to the maximum extent allowed by law, the Parties hereto stipulate that any offending provisions will be modified or altered, as necessary, so as to give such provisions the maximum permissible effect and application intended.
26. **ENTIRE AGREEMENT.** This Agreement, and all of its attachments, constitutes the entire, integrated Agreement between the Parties to it, and this Agreement supersedes all other Agreements, oral or written between the Parties, concerning the subject set forth in this Agreement. This Agreement may not be amended except in writing, with that amendment being signed by both Parties.



SCHEDULE OF FEES FOR PROFESSIONAL SERVICES

PERSONNEL:

Principal.....	\$135 to \$250/hour
Professional.....	\$70 to \$200/hour
Auto Cad Operator.....	\$65 to \$110/hour
Technical/Clerical/Administrative	\$40 to \$80/hour

The specific hourly rate within each classification listed above depends on the experience, special training, and qualifications of the personnel needed for the project. For projects requiring work at any hazardous waste site, there will be a \$10 per hour surcharge added to the normal billing rate for all personnel. Consultants to Raba Kistner (RK) will be charged according to their professional classification.

EXPENSES: Use of company automobiles will be charged at \$1.00 per mile. Automobiles and light trucks assigned to field sites will be charged at \$70.00 per day, plus \$1.00 per mile over 50 miles per day. Copies will be charged at \$0.25 per page.

Other project specific charges for use of RK equipment or for RK testing will be in accordance with established fee schedules. All other project specific, third-party costs will be charged at cost plus 15 percent.

Invoices will be submitted monthly for work in progress in our standard format. They are due and payable upon receipt and become past due 30 days after the billing date. Past due invoices may be subject to late charges at the rate of 1-1/2 percent per month (18 percent per annum). In the event that the State of Texas legislates a sales tax on Professional Services, the amount of the tax will be PAYMENT added to the appropriate service rate charged. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Texas 75397-1037.

Preparation of non-standard invoice will be charged on a time and materials basis in accordance with the rates in this fee schedule.

CONDITIONS: Services will be performed in accordance with our Standard Terms and Conditions.

The proposal to which this schedule is an attachment is valid for 90 days from the date of the proposal.