



**TOWN OF PARADISE VALLEY
ENGINEERING SERVICES CONTRACT**

Michael Baker International, Inc.
Sanitary Sewer Flow Monitoring
PROJECT NO. 2017-06

This Engineering Services Contract (“Contract”) is made and entered into this ____ day of January, 2021, by and between the TOWN OF PARADISE VALLEY, an Arizona municipal corporation, hereinafter referred to as “**Town**,” and Michael Baker International, Inc., a(n) Pennsylvania corporation, authorized to do business in Arizona, hereinafter referred to as “**Engineer**,” whose principal place of business is located at : 2929 North Central Avenue, Suite 800, Phoenix, AZ 85012, (each individually a “Party,” together “Parties.”)

RECITALS

- A. The Town desires to contract for engineering services with Engineer for sanitary sewer flow monitoring, engineering flow analysis and reports as required pursuant to the Intergovernmental Agreement between the Town of Paradise Valley and the City of Scottsdale dated May 17, 2016.
- B. The Engineer is qualified to render the engineering services desired by the Town.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises, covenants, and conditions herein contained, the Town and Engineer agree as follows:

1.0 Description, Acceptance, Documentation

1.1 Scope of Services

The Engineer will act under the authority and approval of the Project Manager to provide the engineering services required by the Contract.

The Engineer is assigned the tasks specified in the attached **Exhibit A, Scope of Work**, which is incorporated by reference and made a part of this Contract. If any provision of the Engineer’s proposal, including but not limited to any limitation of liability or disclaimer of warranty language, conflicts or is in any way inconsistent with any provision of this Contract, this Contract will control.

The Engineer must obtain all necessary information to complete the tasks specified in

Exhibit A, Scope of Work.

1.2 Performance Warranty; Standard of Care.

The Engineer warrants that all work under this Contract will conform to the requirements of this Contract and with the care and skill ordinarily used by members of the same profession practicing under similar circumstances at the same time and in the same locality.

1.3 Acceptance and Documentation

- A. Each task will be reviewed and approved by the Town's Project Manager to determine acceptable completion.
- B. The Town will cooperate to provide all available necessary information to the Engineer for timely completion of the tasks specified in Section 1.1 above.
- C. All documents, including but not limited to, tracings, plans, specifications, maps, sketches, charts, computations, data compilations, studies, and reports, which are prepared in the performance of this Contract are to be and remain the property of the Town and are to be delivered to the Project Manager before final payment is made to the Engineer. The Town may use such documents for other purposes without further compensation to the Engineer; however, any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at Town's sole risk and without liability or legal exposure to Engineer. Any verification or adaptation of the documents by Engineer for other purposes than contemplated by this Contract will entitle Engineer to further compensation as agreed upon between the Parties.

2.0 Fees and Payments

2.1 Fee Schedule

The amount paid to the Engineer will not exceed One Hundred Fifty Nine Thousand Five Hundred Ninety-Five dollars (**\$159,595.00**). The Engineer will be compensated in accordance with the compensation schedule, including hourly rates, shown in **Exhibit A**

2.2 Payment Approval

The time spent for each task must be recorded and submitted to the Project Manager. The Engineer must maintain all necessary documents and accounting records pertaining to time billed and to costs incurred and make these materials available at all reasonable times during the Contract period and for three years after final payment under this Contract.

Monthly payments will be made to the Engineer on the basis of a progress report submitted by the Engineer for work completed through the last day of the preceding calendar month. Each task is subject to review and approval by the Project Manager to determine acceptable completion.

The Project Manager or designee will process a partial payment request. **However, not more than 90% of the total Contract price will be paid before Town's final acceptance of all completed work.**

The Project Manager reserves the exclusive right to determine the amount of work performed and payment due the Engineer on a monthly basis. The Project Manager or designee will notify Engineer if the determination of completed work is different from

Engineer's progress report.

All charges must be approved by the Project Manager before payment.

2.2.1 Payment Terms

The Town of Paradise Valley's payment terms for engineering work under State of Arizona A.R.S. Title 34 requirements is 14 days after invoice submittal by the Engineer and the work is certified and approved by the Town's Project Manager.

The Town has 7 days after receipt of the invoice to prepare and issue a written finding setting forth those items in detail which are not approved for payment under the Contract and which are not certified by the Town's Project Manager. Until such time as such issues are resolved and certified by the Town's Project Manager, the 14-day payment term will not have commenced.

2.3 Price Adjustment

No hourly rate increases are permitted.

3.0 General Terms and Conditions

3.1 Project Manager

The Project Manager for the Town is Paul Mood, Town Engineer; pmood@paradisevalleyaz.gov (email); 480-348-3573 (phone). The Project Manager will oversee the performance of this Contract, assist the Engineer in accessing the organization, audit billings, and approve payments. The Engineer must submit all reports and special requests through the Project Manager. The Town Manager has the authority to authorize Change Orders up to the limits permitted by the Town Code and Town's procurement policy.

3.2 Term of Contract

This Contract shall be effective as of the date first set forth above and shall remain in full force and effect through June 30, 2021 or until completion of the Project Scope of Work, whichever is earlier, unless terminated or extended as otherwise provided in this Contract. .

The Town may, at its option and with the approval of the Engineer, extend the term of this Contract an additional 90 days. Engineer will be notified in writing by the Town of its intent to extend the Contract Term at least thirty (30) calendar days prior to the expiration of the original or any renewal Contract period (or as otherwise agreeable to the Parties).

If any tasks remain incomplete after the completion original and any extended Term, the Town must approve a Contract amendment or issue a change order, as is required by the Town Code and Town Procurement Policy.

3.3 Termination or Cancellation of Contract

The Town may terminate this Contract or abandon any portion of the project that has not been performed by the Engineer.

Termination for Convenience: This Contract is for the convenience of the Town, and as such, Town has the right to terminate this Contract or any part of it for its sole convenience

effective upon receipt by Engineer of written notice by the Town. If terminated, the Engineer must immediately stop all work and will immediately cause any of its suppliers and Subcontractors to stop all work. As payment in full for services performed to the date of the termination, the Engineer will receive a fee for the percentage of services completed. This fee will be in the amount mutually agreed upon by the Engineer and the Town, based on the Scope of Work. If there is no mutual agreement, the Project Manager will determine the percentage of completion of each task detailed in the Scope of Work and the Engineer's compensation will be based on this determination. The Town will make this final payment within 60 days after the Engineer has delivered the last of the partially completed items. The Engineer will not be paid for any work done after receipt of the notice of termination or for any costs incurred by the Engineer's suppliers or Subcontractors, which the Engineer could reasonably have avoided.

Cancellation for Cause: The Town may also cancel this Contract or any part of it for cause with seven (7) days' notice if the Engineer defaults, or if the Engineer fails to comply with any of the terms and conditions of this Contract. Unsatisfactory performance as determined by the Project Manager and failure to provide the Town, upon request, with adequate assurances of future performance, are all causes allowing the Town to terminate this Contract for cause. Upon cancellation for cause, the Town will not be liable to the Engineer for any amount, and the Engineer will be liable to the Town for all damages sustained by the default which caused the cancellation.

If the Engineer is in violation of any Federal, State, County or Town law, regulation or ordinance, the Town may terminate this Contract immediately after giving notice to the Engineer.

If the Town cancels this Contract or any part of the Contract services, the Town will notify the Engineer in writing, and upon receiving notice, the Engineer must discontinue advancing the work and proceed to close all operations.

Upon cancellation, the Engineer must deliver to the Town all documents, including but not limited to drawings, special provisions, field survey notes, reports, and estimates, entirely or partially completed, in any format, including but not limited to written or electronic media, together with all unused materials supplied by the Town. Use of incomplete data will be the Town's sole responsibility.

At the Town's request, the Engineer must appraise the work it has completed and submit its appraisal to the Town for evaluation.

If the Engineer fails to fulfill in a timely and proper manner its obligations, or if the Engineer violates any of the terms of this Contract, the Town may withhold any payments to the Engineer for the purpose of setoff until the exact amount of damages due the Town from the Engineer is determined by a court of competent jurisdiction.

If the Town improperly cancels the Contract for cause; the cancellation for cause will be converted to a termination for convenience in accordance with the provisions of this Section 3.3.

3.4 Funds Appropriation

If the Town Council does not appropriate funds to continue this Contract, the Town may terminate this Contract at the end of the current fiscal period. The Town agrees to give written notice of termination to the Engineer at least 30 days before the end of its current fiscal period and will pay to the Engineer all approved charges incurred through the end of that period.

3.5 **Audit**

The Town may audit all of the Engineer's records, calculations, and working documents pertaining to this work at a mutually agreeable time and place.

The Engineer's records (hard copy, as well as computer readable data), and any other supporting evidence necessary to substantiate any claims related to this Contract must be open to inspection and subject to audit and reproduction by the Town's authorized representative as necessary to permit evaluation and verification of the cost of the work, and any invoices, change orders, payments or claims submitted by the Engineer or any of his payees. The Town's authorized representative must be afforded access, at reasonable times and places, to all of the Engineer's records and personnel throughout the term of this Contract and for a period of 3 years after the final payment.

The Engineer must require all Subcontractors and material suppliers (payees) to comply with the provisions of this section by insertion of these requirements in a written Contract between the Engineer and payee. These requirements will apply to all Subcontractors.

If an audit discloses overcharges by the Engineer to the Town in excess of 1% of the total Contract billings, the actual cost of the Town's audit must be reimbursed to the Town by the Engineer. Any adjustments and payments made as a result of the audit or inspection of the Engineer's invoices and records will be made within a period of time not to exceed 90 days from presentation of the Town's findings to the Engineer.

This audit provision includes the right to inspect personnel records as required by Section 3.22.

3.6 **Ownership of Project Documents**

All documents, including but not limited to, field notes, design notes, tracings, data compilations, studies, and reports in any format, including but not limited to, written or electronic media, prepared in the performance of this Contract will remain the property of the Town and must be delivered to the Project Manager before final payment is made to the Engineer.

When the work detail covers only the preparation of preliminary reports or plans, there will be no limitations upon the Town concerning use of the plans or ideas in the reports or plans for the preparation of final construction plans. In that event, the Town will release the Engineer from any liability for the preparation of final construction plans by others.

3.7 **Completeness and Accuracy**

The Engineer will be responsible for the completeness and accuracy of its work, including but not limited to, survey work, reports, supporting data, and drawings, sketches, etc. prepared by the Engineer and will correct, at its expense, all errors or omissions which may be disclosed. The cost to correct those errors will be chargeable to the Engineer. Additional construction added to the project will not be the responsibility of the Engineer unless the need for additional construction was created by any error, omission, or negligent act of the Engineer. The Town's acceptance of the Engineer's work will not relieve the Engineer of any of its responsibilities.

3.8 **Attorneys' Fees**

Should either Party bring any action for relief, declaratory or otherwise, arising out of this Contract, the prevailing Party will be entitled to receive from the other Party all litigation

and collection expenses, witness fees, court costs, and reasonable attorneys' fees, as determined by the court sitting without a jury. All these fees, costs, and expenses will be considered to have accrued on the commencement of the action and will be enforceable whether or not the action is prosecuted to judgment.

3.9 Successors and Assigns

This Contract will be binding upon the Engineer, its successors and assigns, including any individual, or other entity with or into which the Engineer may merge, consolidate, or be liquidated, or any individual or other entity to which the Engineer may sell or assign its assets.

3.10 Assignment

Services covered by this Contract must not be assigned or sublet in whole or in part without first obtaining the written consent of the Project Manager.

3.11 Subcontractors

The Engineer may engage any additional Subcontractors as required for the timely completion of this Contract. If the Engineer subcontracts any of the work required by the Contract, the Engineer remains solely responsible for fulfillment of all the terms of this Contract.

The Engineer will pay its Subcontractors within seven (7) calendar days of receipt of each progress payment from the Town. The Engineer will pay for the amount of the Work performed by each Subcontractor as accepted and approved by the Town with each progress payment. In addition, any reduction of retention, if any, by the Town will result in a corresponding reduction to Subcontractors who have performed satisfactory work. The Engineer will pay Subcontractors the reduced retention within 14 calendar days of the payment of the reduction of the retention to the Engineer. No Contract between the Engineer and its Subcontractors may materially alter the rights of any Subcontractor to receive prompt payment and retention reduction as provided in this Contract.

If the Engineer fails to make payments in accordance with these provisions, the Town may take any of one or more of the following actions and the Engineer agrees that the Town may take these actions:

- A. To hold the Engineer in default under this Contract;
- B. Withhold future payments including retention until proper payment has been made to Subcontractors in accordance with these provisions;
- C. Reject all future offers to perform work for the Town from the Engineer for a period not to exceed 1 year from the completion date of this project; or
- D. Terminate this Contract.

3.12 Alterations or Additions to Scope of Services

The total scope of the engineering services to be performed is stated in this Contract. Any services requested outside the Project Scope of Work are additional services. The Engineer will not perform these additional services without a written Change Order approved by the Town. It is understood and agreed by the Parties that if the Engineer performs additional services without a written Change Order, the Engineer will not receive any additional compensation.

3.13 Modifications

Any amendment or modification of the terms of this Contract must be in writing and will be effective only after approval of all Parties to this Contract.

3.14 Conflict of Interest

The Engineer warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Engineer, to solicit or secure this Contract, and that it has not paid or agreed to pay any person or persons, other than a bona fide employee working solely for the Engineer any fee, commission, percentage, brokerage fee, gifts or any consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, Town will have the right to annul this Contract without liability or in its discretion to deduct from the Contract price or consideration, or otherwise recover the full amount of any fee, commission, percentage, brokerage fee, gift or contingent fee, together with costs and attorney's fees.

Under A.R.S. § 38-511, as amended, the Town may cancel any contract it is a Party to within three years after its execution and without penalty or obligation, if any person significantly involved in initiating, negotiating, securing, drafting, or creating the contract on behalf of the Town or its departments or agencies is, at any time while the contract or any extension of the contract is in effect, an employee of any other Party to the contract in any capacity or a consultant to any other Party to the contract with respect to the subject matter of the contract. In the event the Town elects to exercise its rights under A.R.S. § 38-511, as amended, the Town agrees to give notice to Engineer.

The Engineer will fully reveal in writing any financial or compensatory agreement which it has with a prospective bidder before the Town's publication of documents for bidding.

3.15 Force Majeure

Neither Party will be responsible for delays or failures in performance resulting from acts beyond their control. These acts will include, but not be limited to, acts of God, riots, acts of war, epidemics, governmental regulations imposed after the fact, fire, communication line failures, or power failures.

3.16 Taxes

The fee listed in this Contract includes all taxes applicable to the services authorized. The Town will have no obligation to pay additional amounts for taxes of any type.

3.17 Advertising

No advertising or publicity concerning the Town's use of the Engineer's services will be undertaken without first obtaining written approval of the Town Manager.

3.18 Counterparts

This Contract may be executed in one or more counterparts, and each executed duplicate counterpart will possess the full force and effect of the original.

3.19 Entire Agreement

This Contract contains the entire understanding of the Parties and no representations, or agreements, oral or written, made before its execution will vary or modify the terms of

this Contract.

3.20 Arizona Law; Venue

This Contract must be governed and interpreted according to the laws of the State of Arizona and any legal proceeding, including but not limited to lawsuits, pertaining to this Contract may be brought only in courts in Maricopa County, Arizona.

3.21 Equal Employment Opportunity

During the performance of this Contract, the Engineer will follow the Federal government's guidelines to ensure that employees or applicants applying for employment will not be discriminated against because of race, color, religion, sex or national origin.

No Preferential Treatment or Discrimination:

In accordance with the provisions of Article II, Section 36 of the Arizona Constitution, the Town will not grant preferential treatment to or discriminate against any individual or group on the basis of race, sex, color, ethnicity or national origin.

3.22 Compliance with Federal and State Laws

The Engineer accepts the applicability to it of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989. In addition, the Engineer accepts the applicability to it of A.R.S. §34-301 and 34-302. The Engineer will include the terms of this provision in all contracts and subcontracts for work performed under this Contract, including supervision and oversight.

Under the provisions of A.R.S. §41-4401, the Engineer warrants to the Town that the Engineer and all its subcontractors will comply with all Federal Immigration laws and regulations that relate to their employees and that the Engineer and all its subcontractors now comply with the E-Verify Program under A.R.S. §23-214(A).

A breach of this warranty by the Engineer or any of its subcontractors will be considered a material breach of this Contract and may subject the Engineer or Subcontractor to penalties up to and including termination of this Contract or any subcontract.

The Town retains the legal right to inspect the papers of any employee of the Engineer or any subcontractor who works on this Contract to ensure that the Engineer or any subcontractor is complying with the warranty given above.

The Town may conduct random verification of the employment records of the Engineer and any of its subcontractors to ensure compliance with this warranty. The Engineer agrees to indemnify, defend and hold the Town harmless for, from and against all losses and liabilities arising from any and all violations of these statutes.

The Town will not consider the Engineer or any of its subcontractors in material breach of this Contract if the Engineer and its subcontractors establish that they have complied with the employment verification provisions prescribed by 8 USCA §1324(a) and (b) of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. §23-214(A). The "E-Verify Program" means the employment verification pilot program as jointly administered by the United States Department of Homeland Security and the Social Security Administration or any of its successor programs.

The provisions of this Article must be included in any contract the Engineer enters into with any and all of its subcontractors who provide services under this Contract or any

subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property. The Engineer will take appropriate steps to assure that all subcontractors comply with the requirements of the E-Verify Program. The Engineer's failure to assure compliance by all its' subcontractors with the E-Verify Program may be considered a material breach of this Contract by the Town.

3.23 Compliance with Americans with Disabilities Act

Engineer acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Engineer will provide the services specified in this Contract in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Engineer agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this Contract and further agrees that any violation of this prohibition on the part of Engineer, its employees, agents or assigns will constitute a material breach of this Contract.

3.24 Boycott of Israel Prohibited

To the extent Title 35 is applicable to the Contract, the Contractor warrants that it is not and will not participate in prohibited activity in contravention of A.R.S. § 35-393.01.

3.25 Evaluation of Engineer's Performance

The Engineer will be evaluated regarding its performance of this Contract. This evaluation will include, but not be limited to, the following consideration for:

- Completeness
- Accuracy
- Utility Coordination
- Technical Expertise
- Organization
- Appearance of plans (line work, lettering, etc.)
- Working relationship with Town staff and others
- Availability
- Communication skills (meetings, correspondence, etc.)

An evaluation may be prepared by the staff and used to evaluate the desirability to proceed with negotiations for additional services.

3.26 Notices

All notices or demands required by this Contract must be given to the other Party in writing, delivered by hand or by registered or certified mail at the addresses stated below, or to any other person(s) or address a Party may substitute by giving written notice as required by this section.

If hand delivered, Notices are received on the date delivered. If delivered by certified or registered mail, Notices are received on the date indicated on the receipt. **Notice by facsimile or electronic mail is not adequate notice.**

On behalf of the Engineer:

Craig Wenger
Michael Baker International, Inc.
2929 North Central Avenue, Suite 800
Phoenix, AZ 85012
Ph: 602-279-1234

On behalf of the Town:

Town of Paradise Valley
Engineering / Public Works Department
6401 East Lincoln Road
Paradise Valley, AZ 85253
ATTN: Paul Mood, Town Engineer
Ph: (480)348-3573

With required copy to:

Town Manager
Town of Paradise Valley
6401 East Lincoln Drive
Paradise Valley, Arizona 85253

Town Attorney
Town of Paradise Valley
6401 East Lincoln Drive
Paradise Valley, AZ 85253

3.27 Independent Contractor

The services the Engineer provides to the Town are that of an Independent Contractor, not an employee, or agent of the Town. The Town will report the value paid for these services each year to the Internal Revenue Service (I.R.S.) using Form 1099.

Town will not withhold income tax as a deduction from contractual payments. As a result of this, Contractor may be subject to I.R.S. provisions for payment of estimated income tax. Contractor is responsible for consulting the local I.R.S. office for current information on estimated tax requirements.

3.28 Ineligible Bidder

The preparer of bid specifications is not eligible to submit a bid or proposal on the solicitation for which they prepared the specification, nor is the preparer eligible to supply any product to a bidder or offeror on the solicitation for which they prepared the specification.

3.29 Indemnification

To the fullest extent permitted by law, Engineer, its successors, assigns and guarantors, must defend, at Engineer's sole expense, indemnify and hold harmless Town of Paradise Valley, its agents, representatives, officers, directors, officials and employees from and against all allegations, demands, proceedings, suits, actions, claims, damages, losses, expenses, including but not limited to, attorney fees, court costs, and the cost of appellate proceedings, and all claim adjusting and handling expense, related to, arising from or out of, or alleged to have resulted from any negligence, recklessness, or intentional wrongful conduct by Engineer or other persons employed or used by the Engineer in the performance of this Contract, including but not limited to, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and any injury or damages claimed by any of Engineer's and Subcontractor's employees. Insurance provisions in this Contract are separate and independent from the indemnity provisions of this section and will not be construed in any way to limit the scope and

magnitude of the indemnity provisions. The indemnity provisions of this section must not be construed in any way to limit the scope and magnitude and applicability of the insurance provisions.

3.30 Provisions Required by Law

Each and every provision of law and any clause required by law to be in this Contract will be read and enforced as though it were included herein and, if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either Party, this Contract will promptly be physically amended to make such insertion or correction.

4.0 Insurance

Failure to provide an appropriate Certificate of Insurance will result in rejection of your certificate and delay in Contract execution.

Additionally, Certificates of Insurance submitted without referencing a Contract number will be subject to rejection and returned or discarded.

4.1 Insurance Representations and Requirements

- A. General: The Engineer agrees to comply with all applicable Town ordinances and state and federal laws and regulations.

Without limiting any obligations or liabilities of the Engineer, the Engineer must purchase and maintain, at its own expense, the required minimum insurance with insurance companies duly licensed or approved to conduct business in the State of Arizona and with an A.M. Best's rating of A+ or above with policies and forms satisfactory to Town. Failure to maintain insurance as required may result in cancellation of this Contract at the Town's option.

- B. No Representation of Coverage Adequacy: By requiring insurance, Town does not represent that coverage and limits will be adequate to protect the Engineer. The Town reserves the right to review any and all of the insurance policies and endorsements cited in this Contract, but it has no obligation to do so. Failure to demand evidence of full compliance with the insurance requirements in this Contract or failure to identify any insurance deficiency will not relieve the Engineer from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Contract.

- C. Coverage Term: The Engineer must maintain all required insurance in full force and effect until all work or services are satisfactorily performed and accepted by the Town of Paradise Valley, unless specified otherwise in this Contract.

- D. Claims Made. In the event any insurance policies required by this Contract are written on a "claims made" basis, coverage shall continue uninterrupted throughout the term of this Contract by keeping coverage in force using the effective date of this Contract as the retroactive date on all "claims made" policies. The retroactive date for exclusion of claims must be on or before the effective date of this Contract, and can never be after the effective date of this Contract. Upon completion or termination of this Contract, the "claims made" coverage shall be extended for an additional three (3) years using the original retroactive date, either through purchasing an extended reporting option; or by continued renewal of the original insurance policies. Submission of annual Certificates of Insurance, citing the applicable coverages and provisions specified herein, shall continue for three (3) years past the completion or termination of this Contract.

- E. Policy Deductibles and or Self-Insured Retentions: The required policies may provide coverage which contain deductibles or self-insured retention amounts. The Engineer is solely responsible for any deductible or self-insured retention amount and the Town, at its option, may require the Engineer to secure payment of the deductible or self-insured retention by a surety bond or irrevocable and unconditional Letter of Credit.
- F. Use of Subcontractors: If any work is subcontracted in any way, the Engineer must execute a written agreement with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the Town requires of the Engineer in this Contract. The Engineer is responsible for executing the Contract with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.
- G. Evidence of Insurance and Required Endorsements: Before commencing any work or services under this Contract, the Engineer must furnish the Project Manager with Certificate(s) of Insurance, or formal endorsements issued by the Engineer's insurer(s) as evidence that policies are placed with acceptable insurers and provide the required coverages, conditions, and limits of coverage and that the coverage and provisions are in full force and effect. If a Certificate of Insurance is submitted as verification of coverage, the Town will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Contract. If any of the required policies expire during the life of this Contract, the Engineer must forward renewal Certificates to the Town within 10 days after the renewal date containing all the necessary insurance provisions.

Certificates shall specifically cite the following provisions endorsed to the Engineer's policy:

- 1. The Town of Paradise Valley, its elected officials, agents, representatives, officers, directors, officials and employees are named as an Additional Insured under the following policies:
 - a) Commercial General Liability
 - b) Auto Liability
 - c) Excess Liability - Follow Form to underlying insurance as required.
- 2. The Engineer's insurance must be primary insurance for all performance of work under this Contract.
- 3. All policies, except Professional Liability insurance, if applicable, waive rights of recovery (subrogation) against the Town, its elected officials, agents, representatives, officers, directors, officials and employees for any claims arising out of work or services performed by the Engineer under this Contract.
- 4. If the Engineer receives notice that any of the required policies of insurance are materially reduced or cancelled, it will be Engineer's responsibility to provide prompt notice of same to the Town, unless such coverage is immediately replaced with similar policies.

4.2 Required Coverage

- A. Commercial General Liability: The Engineer must maintain "occurrence" form Commercial General Liability insurance with an unimpaired limit of not less than \$2,000,000 for each occurrence, \$2,000,000 Products and Completed Operations

Annual Aggregate, and a \$4,000,000 General Aggregate Limit. The policy must cover liability arising from premises, operations, independent contractors, products-completed operations, and personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this section, the Excess insurance must be "follow form" equal or broader in coverage scope than the underlying insurance.

- B. Professional Liability: The Engineer must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by the Engineer, or anyone employed by the Engineer, or anyone for whose acts, mistakes, errors and omissions the Engineer is legally liable, with a liability limit of \$2,000,000 each claim and \$4,000,000 annual aggregate. Professional Liability coverage specifically for Architects, Engineers and Surveyors shall contain contractual liability insurance covering the contractual obligations of this Contract. If the Professional Liability insurance policy is written on a "claims made" basis, coverage must extend for 3 years past completion and acceptance of the work or services, the Engineer must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3-year period.
- C. Vehicle Liability: If any vehicle is used in the performance of the Scope of Work that is the subject of the Contract, the Engineer must maintain Business Automobile Liability insurance with a limit of \$1,000,000 each occurrence on the Engineer's owned, hired, and non-owned vehicles assigned to or used in the performance of the Engineer's work or services under this Contract. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than the underlying insurance.
- D. Workers Compensation Insurance: The Engineer must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of the Engineer's employees engaged in the performance of work or services under this Contract, and must also maintain Employers' Liability Insurance of not less than \$500,000 for each accident, \$500,000 disease for each employee and \$1,000,000 disease policy limit.

5.0 Software Licenses

If the Engineer provides to the Town any software licenses, the following provisions apply:

5.1 Source Code Availability

- A. The Engineer must furnish the Town, without charge, a single copy of the Source Code for the Software immediately upon the occurrence of any of the following:
 - 1. The Engineer becomes insolvent; or
 - 2. The Engineer ceases to conduct business; or
 - 3. The Engineer makes a general assignment for the benefit of creditors;or
 - 4. A petition is filed in Bankruptcy by or against the Engineer.
- B. Use of the Source Code must not be subject to any greater restrictions than use of the Software itself.
- C. The Town must have the right to modify the Source Code in any manner the Town believes is appropriate, provided that the Source Code as modified must remain subject to the restrictions of Section 5.1(B).

5.2 Proprietary Protection

- A. The Town agrees that if the Engineer informs the Town that the Software is confidential information or is a trade secret property of the Engineer; the Software is disclosed on a confidential basis under this Contract and in accordance with the terms of this Contract.
- B. The Engineer must not use or disclose any knowledge, data or proprietary information relating to the Town obtained in any manner.
- C. As permitted by Arizona Law, the Parties agree that during the term of this Contract and of all Licenses granted under this Contract, and for a period of seven (7) years after termination of this Contract and of all licenses granted by this Contract, to hold each other's confidential information in confidence. The Parties agree, unless required by government regulations or order of Court, not to make each other's confidential information available in any form to any third party or to use each other's confidential information for any purposes other than the implementation of this Contract. However, if the Engineer's confidential information is requested to be divulged under the provisions of the Arizona Public Records Act, A.R.S., Title 39, the Engineer must reimburse the Town for the full cost of the Town's refusal to release the information, including the costs of litigation, the Town's attorney fees, fines, penalties or assessments of the opposing Party's attorney fees. Town and Engineer agree to take all reasonable steps to ensure that confidential information is not disclosed or distributed by its employees or agents in violation of the provisions of this Contract.

5.3 Non-Infringement

The Engineer warrants that the Software provided to the Town does not and will not infringe upon or violate any patent, copyright, trade secret or other proprietary or property right of any person or entity.

In the event of a claim against the Town asserting or involving such an allegation, the Engineer will defend, at the Engineer's sole expense, and will indemnify and hold harmless the Town and its elected officials, agents, representatives, officers, directors, officials and employees against any loss, cost, expense (including attorney fees) or liability or damages arising out of the claim, whether or not the claim is successful. In the event an injunction or order is obtained against use of the Software, or if in the Engineer's opinion the Software is likely to become the subject of a claim of infringement, the Engineer will, at its option and its sole expense:

1. Procure for the Town the right to continue using the Software; or
2. Replace or modify the Software so that it becomes non-infringing (this modification or replacement must be functionally equivalent to the original); or
3. If neither 1 nor 2, above, is practicable, repurchase the Software on a depreciated basis utilizing a straight line 5-year period, commencing on the date of acceptance.

5.4 Third Party License

The Engineer must sublicense to the Town any and all third-party Software required in this Contract. The Town reserves the right to accept or reject third-party license terms. If the Town rejects the terms of a third-party license, it will be the Engineer's responsibility to negotiate acceptable terms or to supply Software from another source with terms acceptable to the Town. The Town's acceptance of the third-party license terms will not be unreasonably withheld.

6.0 Severability and Authority

6.1 Severability

If any term or provision of this Contract is found to be illegal or unenforceable, then notwithstanding such illegality or unenforceability, this Contract will remain in full force and effect and the term or provision will be considered to be deleted.

6.2 Authority

Each Party warrants that it has full power and authority to enter into and perform this Contract, and that the person signing on behalf of each Party has been properly authorized and empowered to enter into this Contract. Each Party acknowledges that it has read, understands, and agrees to be bound by the terms and conditions of this Contract.

7.0 Request For Taxpayer I.D. Number & Certification I.R.S. W-9 Form

Upon request, the Contractor shall provide the required I.R.S. W-9 FORM which is available from the IRS website at www.IRS.gov under its forms section.

8.0 Survival

Except as specifically provided otherwise in this Contract, each warranty, representation, indemnification and hold harmless provision, insurance requirement, and every other right, remedy and responsibility of a Party, will survive completion of the Scope of Work, or the earlier termination of this Contract.

9.0 Order of Precedence

In the event of a conflict between the terms of this Contract , the following is the order of precedence:

- a. Contract Amendments
- b. Contract
- c. Exhibit A – Project Scope of Work and Fee

(Signatures on Following Page)

The Parties enter into this Contract effective as of the date shown above.

Town of Paradise Valley,
an Arizona municipal corporation

By: Jill Keimach
Its: Town Manager

ATTEST:

Duncan, Miller, Town Clerk (SEAL)

APPROVED AS TO FORM:

Deborah Robberson, Acting Town Attorney

MICHAEL BAKER INTERNATIONAL,
INC., a Pennsylvania corporation

By: Craig Wenger
Its: Vice President

**TOWN OF PARADISE VALLEY
ENGINEERING SERVICES CONTRACT**

Michael Baker International, Inc.
Sanitary Sewer Flow Monitoring
PROJECT NO. 2017-06

EXHIBIT A

**PROJECT SCOPE OF
WORK AND FEE**

(See Attached Michael Baker International, Inc. Letter to Paul Mood dated January 19, 2021 providing Scope of Work and Design Fee)

Michael Baker

I N T E R N A T I O N A L

January 19, 2021

Mr. Paul Mood
Town Engineer
Town of Paradise Valley
6401 E. Lincoln Drive
Paradise Valley, Arizona 85253

SUBJECT: Sewer Flow Monitoring Project - Phase 1 and 2

Dear Mr. Mood:

Michael Baker International, Inc. (**CONSULTANT**) is pleased to present this Scope of Work and Design Fee for the sewer flow monitoring project located in the Town of Paradise Valley (**CLIENT**), Arizona. Should the attached meet your expectations, then we should discuss how to proceed towards an executed contract to complete this work.

Adrian Navarro will be the Project Manager on this project and can be reached at 602-798-7565 (office), 602-284-7608 (mobile) or by email anavarro@mbakerintl.com. Please feel free to contact me or Adrian with any questions or comments you may have.

Sincerely,



Azeez J Saliba, P.E.
Senior Associate
Water/Wastewater Group Lead

Attachments: Exhibit A – Scope of Work
Exhibit B – Fee Proposal
Exhibit C – Subconsultant Proposal

Exhibit A- Scope of Work

Exhibit A SCOPE OF WORK

Sewer Flow Monitoring Project – Phase 1 and 2

The Town of Paradise Valley (CLIENT) plans to analyze up to nineteen (19) Basin locations including up to sixteen (16) will be monitored in the Month of March to support an intergovernmental agreement between CLIENT and the City of Scottsdale. This project will be performed in two phases as set forth below:

Phase 1 – Flow Monitoring Coordination

This phase of the project will develop the methods to monitor the sewer flow basins within the Town of Paradise Valley.

Task 1.1 - Kick-off Meeting

The CONSULTANT shall schedule and facilitate a virtual kickoff meeting with the CONSULTANT project team and selected CLIENT staff to review the scope of work and discuss the overall goals of the project. The kick-off meeting shall identify key CONSULTANT and CLIENT personnel. The Kick-off Meeting shall be scheduled within 3 calendar days after the Notice to Proceed is issued.

Deliverable 1.1 - The CONSULTANT shall prepare a meeting agenda and minutes of the Kick-off Meeting for distribution to the attendees within three (3) working days of the meeting. The CONSULTANT shall provide a contact list (name, role, phone number and e-mail address) of the CONSULTANT project team and CLIENT staff involved with the project.

Task 1.2 - Progress Meetings

The CONSULTANT shall schedule and facilitate two (2) virtual progress meetings to coordinate upcoming meetings, existing flow basin mapping, request information, coordinate phase 2 schedule, discuss expectations for remaining work and approval to proceed to Phase 2.

Deliverable 1.2 - The CONSULTANT shall prepare minutes of the progress meetings for distribution to the attendees within three (3) working day of the meeting.

Task 1.3 – Existing Sewer Basin Mapping

The CONSULTANT shall reproduce the existing sewer basin boundaries and parcels, include sewer mains, connections, street names and flow monitoring locations on a figure. The CLIENT shall provide available GIS data, existing connections, monitoring locations and reports to complete this task.

Deliverable 1.3 - The CONSULTANT shall prepare figures of each flow monitoring basin to coordinate with the CLIENT, the City of Scottsdale, and the Subconsultant.

Task 1.4 – Coordination Meeting with City of Scottsdale

The **CONSULTANT** shall facilitate one virtual (1) meeting with the **CLIENT**, City of Scottsdale and Subconsultant ADS Environmental Services “ADS” to review the flow monitoring locations. Discussion items will include traffic control needs for the monitoring team (including support from the **CLIENT/CITY** if needed), responsibilities regarding cleanliness of sites, alternate site location options, no fee permits, dates in March for monitoring, approval of accuracy of the flow monitoring meters and the methods to use in the flow analysis. The **CLIENT** shall schedule the meeting with City of Scottsdale.

Deliverable 1.4 - The **CONSULTANT** shall prepare a meeting agenda and minutes of the coordination meeting for distribution to the attendees within three (3) working days of the meeting.

Phase 2 – Flow Monitoring Report

Task 2.1 – Approach Discussion

The **CONSULTANT** shall schedule and facilitate an approach discussion with the **CONSULTANT** project team, ADS and selected **CLIENT** staff to review the scope of work and discuss the overall goals of the project. The approach discussion shall identify key **CONSULTANT** and **CLIENT** personnel. The Kick-off Meeting shall be scheduled within 3 working days after the Notice to Proceed is issued for Phase 2.

Deliverable 2.1 - The **CONSULTANT** shall prepare an agenda and minutes of the approach discussion for distribution to the attendees within three (3) working days of the meeting. The **CONSULTANT** shall provide a contact list (name, role, phone number and e-mail address) of the **CONSULTANT** project team and **CLIENT** staff involved with the project.

Task 2.2 – Site Visit to Manholes

The **CONSULTANT** shall schedule a site visit for nineteen (19) manhole locations to identify/verify the location of monitor installation. The **CONSULTANT** shall photograph and document locations for ADS. The **CLIENT** will provide the **CONSULTANT** with a City staff member to come and open the manholes during the site visit to identify/verify the location of monitor installation. The City staff member and **CONSULTANT** will coordinate to locate and mark manholes prior to the site visit. The City staff member and **CONSULTANT** will coordinate and determine if the standard traffic control set up developed in phase 1 will work. The **CONSULTANT** shall coordinate with **CLIENT** to confirm monitoring locations and scheduled a site visit within 15 working days after the Notice to Proceed is issued for Phase 2.

Deliverable 2.2 - The **CONSULTANT** shall coordinate with the **CLIENT** a 14 working day schedule to visit the manhole site locations within 15 working days after the Notice to Proceed is issued.

Task 2.3 – Site Photo Report

The **CONSULTANT** shall prepare a report that photographs and identifies the basin and manhole location of the manholes visited in **Task 2.2** for the ADS installations. The **CONSULTANT** shall coordinate the report with ADS to confirm locations and scheduled site investigations. ADS will prepare the final site report for **CLIENT** approval of final site locations.

Deliverable 2.3 - The **CONSULTANT** shall prepare a report that photographs and identifies the location for ADS installations within 25 working days after Notice to Proceed is issued for Phase 2. The **CONSULTANT** shall coordinate the ADS site report for **CLIENT** approval of final site locations.

Task 2.4 – Flow Analysis

The **CONSULTANT** shall develop a flow rate based on water usage for each basin with flow too low to monitor with a meter. The **CONSULTANT** shall coordinate with **CLIENT** to update the existing basin summary table dated March 2005. The method to be used will be approved and discussed by the **CLIENT** and City of Scottsdale in Phase 1 of the project.

Task 2.5 – Flow Monitoring Report

The **CONSULTANT** shall prepare a design report with approved flow rate calculations, flow monitoring results if available, summary table of the total connections for the 19 basins, figures and appropriate appendices. This report will include the ADS final report.

Deliverable 2.5 - The **CONSULTANT** shall prepare the Final Design Report in .PDF format.

Task 2.6 – Subcontractor Coordination

The **CONSULTANT** shall coordinate with flow monitoring Subconsultant ADS to identify, install, monitor and report data collated in the month of March.

Deliverable 2.6 - The **CONSULTANT** shall coordinate with ADS to prepare the Final Report.

Project Timeline

The proposed preliminary timeline to complete the flow monitoring in March is:

Phase 1

Kick Off Meeting	Within 3 working days from Notice to Proceed
Existing Basins Mapping	Within 5 working days from Notice to Proceed
Progress Meeting	Within 7 working days from Notice to Proceed

City of Scottsdale Meeting Within 10 working days from Notice to Proceed
Progress Meeting Approval Within 15 working days from Notice to Proceed

Phase 2

Approach Discussion Within 3 working days from Notice to Proceed
Site Visit Within 15 working days from Notice to Proceed
Site Report Within 25 working days from Notice to Proceed
Flow Monitoring Within 45 working days from Notice to Proceed
Final Report Within 60 working days from Notice to Proceed

Overhead Direct Cost

Paradise Valley shall reimburse **CONSULTANT** for all out of pocket expenses, including but not limited to deliveries, mileage, parking, postage, and reprographics, at a cost not to exceed **\$3,050.00** without **CLIENT**'s prior written approval. The **CONSULTANT** will provide back-up documentation when invoicing for reimbursable at Paradise Valley's request.

Additional Services: Tasks which are not specifically identified herein or are specifically identified as additional services are considered Additional Services for purposes of this AGREEMENT. Paradise Valley may request that **CONSULTANT** perform Additional Services. However, **CONSULTANT** is not obligated to perform requested Additional Services unless 1) a modification to this AGREEMENT has been fully executed setting forth the scope, schedule and fee for such Additional Services; or, 2) NTP in writing from **CLIENT** is received stating Additional Services to be completed with a not to exceed amount while modification is being processed.

Additional Allowance

Paradise Valley shall have the option to add an additional location to the nine (9) day study. The additional locations to be monitored will be at a cost of **\$3,000.00** for each additional location and up to four (4) additional location may be added.

The **CONSULTANT** shall coordinate with flow monitoring Subconsultant ADS to include, install, monitor and report data collated **CONSULTANT** shall include a cost of **\$765.00** for each additional location and up to four (4) additional location may be added.

Paradise Valley Responsibilities

CLIENT responsibilities include, but are not limited to, the following:

- A PM will be assigned to represent **CLIENT**.
- The PM will coordinate the **CONSULTANT**'s contract, deliverables and invoices.
- The PM will supply the **CONSULTANT** with printed copies of all relevant Paradise Valley reports, GIS data, studies, and plans to accomplish the analysis in the scope of work. The PM shall also supply the **CONSULTANT** with electronic copies of documents when available.

Exclusions

The following items are specifically excluded from the **CONSULTANT**'s scope of services. However, these items can be provided for an additional fee.

- Permit Fees
- Review Fees
- Construction Fees
- Traffic Control
- Bidding Documents
- Material Specifications
- Contract Forms
- Permitting
- Post Design
- Legal Descriptions are not included for this project.
- Subsurface utility locating (potholing)
- General and Special Conditions
- Geotechnical investigation
- Biological investigation
- Archeological investigation
- Materials testing
- File application for federal and state
- Lighting and Luminaire photometric analysis
- Section 401 Permits
- Section 401 (Non-Notification)
- Section 402, AZPDES Permit (including storm water) including SWPPP preparation
- Any item not specifically listed in the scope of work

EXHIBIT B

Fee Proposal

EXHIBIT B - FEE PROPOSAL

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;"> <p>Michael Baker INTERNATIONAL</p> </div> <div style="text-align: center;"> <p>Sewer Flow Monitoring Project <i>Town of Paradise Valley</i></p> </div> </div>										
Classification	Project Principal (QA/QC)	Project Manager	Project Engineer	Design Engineer	Designer	Clerical	Total Hours	Total Labor	Subconsultant	Total
Hourly Rate:	180.00	180.00	130.00	130.00	95.00	95.00				
Phase 1 - Flow Monitoring Coordination										
Task 1.0 – Meetings, Progress Reports and Coordination										
Subtask 1.1 - Kick-off Meeting	1	2	2		2	1	8	1,085.00		1,085.00
Subtask 1.2 - Progress Meetings	1	8	4		4	2	19	2,710.00		2,710.00
Subtask 1.3 - Existing Sewer Basin Mapping		4		8	24	4	40	4,420.00		4,420.00
Subtask 1.4 – Coordination Meeting with City of Scottsdale	1	4	2		4	2	13	1,730.00		1,730.00
<i>Subtotal Project Management</i>	3	18	8	8	34	9	80.00	9,945.00	0.00	9,945.00
Phase 2 - Flow Monitoring Report										
Task 2.1 - Approach Discussion	2	4	4		4	4	18	2,360.00		2,360.00
Task 2.2 - Site Visit to Manholes		60			60		120	16,500.00		16,500.00
Task 2.3 - Site Photo Report	4	16		24	32	8	84	10,520.00		10,520.00
Task 2.4 - Flow Analysis	7	14	42	56	60		179	22,220.00		22,220.00
Task 2.5 - Flow Monitoring Report	4	16	24	32	40	8	124	15,440.00		15,440.00
Task 2.6 - Subcontractor Coordination	4	24		24	16	6	74	10,250.00	54,250.00	64,500.00
<i>Subtotal Design</i>	21	134	70	136	212	26	599	77,290.00	54,250.00	131,540.00
Not to Exceed Costs										
Overhead Direct Costs (Reproduction, mileage, delivery and postage)										3,050.00
Additional Allowance (\$3,000 per manhole monitoring + 4 hrs per manhole for coordination of up to 4 additional)	4	8	4			4	20	3,060.00	12,000.00	15,060.00
<i>Subtotal Not to Exceed</i>	4	8	4	0	0	4	20	3060	12,000.00	18,110.00
Total	28	160	82	144	246	39	699	90,295.00	66,250.00	159,595.00

Dose not include below:

- Permit fees
- Survey

EXHIBIT C

Subconsultant Proposal

December 31, 2020

Adrian Navarro
Michael Baker International
2929 North Central Avenue, suite 800
Phoenix, AZ 85012

**Re: Temporary Flow Monitoring
Paradise Valley, AZ**

Dear Mr. Navarro,

We are pleased to have the opportunity to submit this letter proposal to conduct sewer flow monitoring for Michael Baker International Corporation in Paradise Valley, AZ. ADS is uniquely qualified to assist you with this flow monitoring project, given our forty-five years of experience performing similar projects throughout the country including extensive work in Arizona. Enclosed please find a detailed scope of work and pricing for your review.

Our proposal is valid for sixty (60) days and subject to the ADS standard terms and conditions for professional services which are attached for your review and signature.

We look forward to working with you on this and other future projects. Thank you for the opportunity to propose on your requirements. If you have any questions regarding this proposal, please do not hesitate to call me at (213) 393-8705.

Sincerely,



Heather McPherson PE
Business Development Manager

Enclosure

Proposed Scope of Work

ADS Environmental Services (“ADS”) will provide temporary flow monitoring services at twelve (12) monitoring locations for a period of nine (9) days that will include two weekends of flow data for Michael Baker International Corporation (“Client”) in Paradise Valley, AZ (“City”). The work will be performed in three phases as set forth below:

Phase I – Mobilization

- 1) **Kick-off Meeting**. Phase I will begin with a kick-off meeting between representatives of Client, City and ADS. The purpose of the kick-off meeting is to discuss project scope, establish lines of communication, set milestones, and set the project schedule. (Conference call or email kickoff meeting for small projects)
- 2) **Site Locations**. ADS will work with Client to identify/verify the location of monitor installations.
- 3) **Site Investigation**. Once the installation sites are provided to ADS, ADS field crew(s) will perform site investigations. ADS will utilize a 2-person field crew for fieldwork and comply with Federal standards for confined-space entry. The proposed flow monitoring location will be located, inspected, and verified for hydraulic suitability. ADS will also check for debris in the manhole that could impact data quality.
- 4) **Site Reports**. Site reports will be generated upon completion of the site investigations. The site reports will include a sketch of the general location, physical characteristics and diameters of the proposed monitoring locations, manhole depths, flow measurements, and other comments pertinent to the location such as any special traffic or safety issues. Final site locations to be approved by Client.
- 5) **Equipment**. ADS will utilize the ADS® Model Triton+™ flow monitor during the course of this project. A typical monitor installation will include a peak combo sensor that includes in the same housing an uplooking ultrasonic depth, redundant pressure depth, and continuous wave peak velocity sensor mounted at the invert.
- 6) **Monitor Activation**. Once installed, the monitors will be activated and set to take readings of at least 15-minute intervals. ADS Field crews will take manual depth readings with a ruler and velocity readings with a portable, instantaneous velocity meter in order to confirm the monitor is collecting accurate data based on the actual existing hydraulic conditions at each location.

Phase II – Flow Monitoring

- 1) **Flow Monitoring**. Once the monitors are installed and verified to be in working order, ADS will monitor the flows for a maximum period of nine (9) calendar days (“monitoring period”). This initial monitoring period can be extended based on mutual consent and written agreement of additional work and price for such additional work.

- 2) **Data Collection and Equipment Maintenance.** Field crews will return to each of the locations to perform site maintenance and site confirmations as necessary. ADS is an ISO 9001 certified company and has proprietary internal quality procedures for all fieldwork. This includes cleaning depth and velocity sensors, confirmations as needed, and checking an installation to make sure that the ring is secure in the pipe. The ADS data analyst will also review the data on a regular basis throughout the monitoring period.
- 3) **Demobilization.** Field crews will continue data collections and confirmations (as necessary) until the end of the monitoring period. Once authorized, crews will immediately begin removing the flow monitors and deliver final data to the data analyst.

Phase III – Data Editing and Reporting

- 1) **Data Analysis.** Upon completion of the monitoring period, a trained ADS Data Analyst will analyze and finalize the data. The data analyst will directly calculate flow using the continuity equation from recorded depth and average velocity data. Flow quantities as determined by the continuity equation will be plotted. The analyst will also utilize scatter plots (depths vs. velocity readings) both to verify monitor accuracy.
- 2) **Data Delivery and Final Report.** ADS will prepare a Final Report in .PDF format of the flow data in tabular, hydrograph, and scattergraph format. Flow data in electronic format will also be provided.

NOTE: ADS's Flow monitors are capable of providing very accurate and precise (repeatable) flow data. However, under some complex hydraulic conditions such as frequent backwater, surcharging, reverse flows, and complex bends in the flow path leading to and from the associated manhole in which the flow monitor is placed, the accuracy of the data is diminished. It is important that the Client understands that ADS's temp flow monitoring equipment is some of the best available in capturing flow data in complex hydraulic situations, but that accuracy may be compromised in locations immediately upstream of pump stations or other locations where the above listed hydraulic conditions can sometimes be persistent.

Client and City Responsibilities:

- 1) Access to the site of work with sufficient area for placement of personnel and equipment, including all right-of-way and ramps, if required.
- 2) Assist in obtaining no fee permits and provide traffic control services at sites that require more than our standard ADS traffic control (2-person crew, lighted arrowboard, 18 cones, 3 signs).
- 3) If sewer/storm line is dirty and full of debris, ensure that selected sites have been jet cleaned to minimize hydraulic deficiencies or select an alternate location.
- 4) Provide any known information concerning bypasses, overflows, base flows, critical surcharge areas, and maintenance habits.

Proposed Pricing

The estimated fee to complete the Project Scope of Work is as Follows:

Phase	Description: Flow Monitoring Study (12 Flow Monitors– 9 days)	Cost
Mobilization	Mobilization of crews and equipment	
Flow Monitoring	Field investigation, installation, data collection, monitor maintenance for twelve (12) flow monitors for nine (9) days, which will include two weekends.	
Data Analysis	Data analysis and preparation of a final report	
Total Project Cost*	Twelve (12) flow monitors for nine (9) days, which will include two weekends.	\$54,250.00
Optional Pricing	Option to add an additional location to the above nine (9) day study.	\$3,000/additional location

*Pricing Assumptions: Mobilization of 20% of contract value is due at mobilization. The balance will be invoiced monthly. Any applicable Federal, state, or local taxes are not included; No Prevailing Wage or MBE requirements; Payment terms net 30 days.