



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item number: 5.h

Title:

Recommendation to Award Proposal for Sanitary Manhole Rehabilitation Bidding Services and Construction Oversight

Presenter:

Tim Wilson

Meeting: Government Services Committee

Date: September 28, 2020

Proposed Cost: \$67,429

Budgeted Amount: \$75,000

Not Budgeted:

Executive Summary *(if not budgeted please explain):*

The Sanitary Sewer Manhole Rehabilitation Program is an ongoing Capacity, Management, Operations and Maintenance (CMOM) Program to decrease the amount of inflow and infiltration. This program will repair several manholes extending the service life of the structure within the sanitary system. This year the bid for manhole rehabilitation will cover a single service area of Eastern 2 (see attached map).

The City will work with the engineering team of Engineering Enterprises, Inc. (EEI) in final preparation of bid documents and to review the submitted bids for this project. The projected bid is expected to open in November 2020. After staff makes the recommendation to award the construction contract, EEI will aid with construction oversight and project inspections. The expectation is that this construction project will move forward this upcoming spring season.

EEI was originally awarded the CMOM Professional Service Agreement as part of an RFQ process. In reviewing EEI's proposed rates, contract and quality of professional services on other projects within the City, Staff has determined EEI provides a competitive cost for their engineering services. The proposed contract is hourly not to exceed.

Attachments *(please list):*

* EEI Construction Oversight Proposal * Area Location Maps

Recommendation/Suggested Action *(briefly explain):*

Recommendation to award proposal to Engineering Enterprises, Inc. for 2020 Manhole Rehabilitation Bidding Services and Construction Oversight in an amount of \$67,429.



August 27, 2020

Mr. Tim Wilson
Public Works Manager - Environmental Services
City of St. Charles
Two East Main Street
St. Charles, IL 60174

**Re: Basin Eastern 2 - 2020 Manhole Rehabilitation
City of St. Charles, Kane & DuPage Cos., IL**

Dear Mr. Wilson:

In accordance with your request, enclosed for your review and consideration is our proposed agreement to provide design and construction engineering services for the Basin Eastern 2 - 2020 Manhole Rehabilitation project. The agreement includes a detailed scope of services, estimate of level of effort and associated cost and schedule for the project. We are proposing to conduct a project initiation meeting and one (1) progress review meeting for the design phase of the project, where we will present our progress and discuss the planning efforts with you and other City staff.

We look forward to continuing our outstanding partnership with the City and look forward to working with you and members of your staff on this project. If you have any questions or require any additional information, please do not hesitate to contact me.

Respectfully submitted,

ENGINEERING ENTERPRISES, INC.

A handwritten signature in blue ink that reads 'Jeffrey W. Freeman'.

Jeffrey W. Freeman, P.E., CFM, LEED AP
Chief Executive Officer

JWF/kep

Enclosures

pc: Matt Wilson – Environmental Services Division Manager (Via E-mail)
Dave Todd – Environmental Services Assistant Division Manager (Via E-mail)
STD, DMT, ARS, DRA, KEP – EEI (Via E-mail)

**ATTACHMENT A
AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES**

This Agreement, by and between the City of St. Charles, Kane and DuPage Counties, Illinois, hereafter referred to as the OWNER, and Engineering Enterprises, Inc., Sugar Grove, Illinois hereinafter referred to as the ENGINEER:

The OWNER intends to:

- Rehabilitate Manholes located in Basin Eastern 2

in the City of St. Charles, Kane and DuPage Counties, State of Illinois for which the ENGINEER agrees to perform the various professional engineering services for the design, permitting and construction of said improvements.

WITNESSETH:

That for and in consideration of the mutual covenants and promises between the parties hereto, it is hereby agreed:

SECTION A - PROFESSIONAL DESIGN ENGINEERING SERVICES

The ENGINEER shall furnish professional design engineering as follows:

1. The ENGINEER will attend conferences with the OWNER, or other interested parties as may be reasonably necessary, including:
 - (a) One (1) Project Initiation Meeting
 - (b) One (1) Progress Review Meeting
2. The ENGINEER will perform the necessary preliminary and design engineering to accomplish the detailed design of the project, prepare construction drawings, specifications, and contract documents, and prepare a final cost estimate based on final design for the entire system. The proposed work items for the design engineering services are as follows:

(Section A – Continued)

(a) DESIGN ENGINEERING

- i. Evaluate Manhole Rehab Alternatives
- ii. Prepare Base Exhibits
- iii. Prepare Draft Front-End Documents
- iv. Prepare Draft Technical Specifications
- v. Prepare Draft Bid Schedule
- vi. Prepare Engineer's Estimate
- vii. Complete Draft Project Manual
- viii. Coordinate Review and Approval with City
- ix. Finalize Project Manual
- x. Attend Pre-Bid Meeting
- xi. Respond to Inquiries, Prepare and Distribute Addenda, etc.
- xii. Attend Bid Opening, Review Bids, Prepare Bid Tabulation

3. The contract documents furnished by the ENGINEER under Section A shall utilize IEPA endorsed construction contract documents, including Supplemental General Conditions, Contract Change Orders, and partial payment estimates.
4. Prior to the advertisement for bids, the ENGINEER will provide for each construction contract, not to exceed 5 copies of detailed drawings, specifications, and contract documents for use by the OWNER, appropriate Federal, State, and local agencies from whom approval of the project must be obtained. The cost of such drawings, specifications, and contract documents shall be included in the basic compensation paid to the ENGINEER.
5. The ENGINEER will furnish additional copies of the drawings, specifications and contract documents as required by prospective bidders, material suppliers, and other interested parties, but may charge them for the reasonable cost of such copies. Upon award of each contract, the ENGINEER will furnish to the OWNER five sets of the drawings, specifications, and contract documents for execution. The cost of these sets shall be included in the basic compensation paid to the ENGINEER. Original documents, survey notes, tracings, and the like, except those furnished to the ENGINEER by the OWNER, are and shall remain the property of the ENGINEER.

(Section A – Continued)

6. The drawings prepared by the ENGINEER under the provisions of Section A above shall be in sufficient detail to permit the actual location of the proposed improvements on the ground. The ENGINEER shall prepare and furnish to the OWNER without any additional compensation, three copies of map(s) showing the general location of needed construction easements and permanent easements and the land to be acquired. Property surveys, property plats, property descriptions, abstracting and negotiations for land rights shall be accomplished by the OWNER, unless the OWNER requests, and the ENGINEER agrees to provide those services. In the event the ENGINEER is requested to provide such services, the ENGINEER shall be additionally compensated as set out in Section D hereof.
7. The ENGINEER will attend the bid opening and tabulate the bid proposal, make an analysis of the bids, and make recommendations for awarding contracts for construction.
8. The ENGINEER further agrees to obtain and maintain, at the ENGINEER's expense, such insurance as will protect the ENGINEER from claims under the Workman's Compensation Act and such comprehensive general liability insurance as will protect the OWNER and the ENGINEER from all claims for bodily injury, death, or property damage which may arise from the performance by the ENGINEER or by the ENGINEER's employees of the ENGINEER's functions and services required under this Agreement.
9. The ENGINEER will complete the Preliminary and Final Design, specifications and contract documents and submit for approval of the OWNER, and all State regulatory agencies to meet the project schedule(s) as summarized in Attachment C: "Schedule of Work – Basin Eastern 2 - 2020 Manhole Rehabilitation" dated August 24, 2020.

If the above is not accomplished within the time period specified, this Agreement may be terminated by the OWNER. The time for completion may be extended by the OWNER for a reasonable time if completion is delayed due to unforeseeable cases beyond the control and without the fault or negligence of the ENGINEER.

SECTION B - PROFESSIONAL CONSTRUCTION ENGINEERING SERVICES

The ENGINEER shall furnish professional construction engineering services including but not limited to the following:

1. The proposed work items for the construction engineering services are as follows:
 - (a) CONSTRUCTION ENGINEERING SERVICES
 - i. Communication and Project Administration
 - ii. Attend Pre-Construction Meeting and Construction Progress Meeting
 - iii. Review Pay Applications
 - iv. Review Shop Drawings, Manhole Inspection Reports and RFI's
 - v. Construction Observation (Part-Time for 3-Months) and Punchlist
2. The ENGINEER will review, for conformance with the design concept, shop and working drawings required by the construction Contract Documents and indicate on the drawings the action taken. Such action shall be taken with reasonable promptness.
3. The ENGINEER will interpret the intent of the drawings and specifications to protect the OWNER against defects and deficiencies in construction on the part of the contractors. The ENGINEER will not, however, guarantee the performance by any contractor.
4. The ENGINEER will evaluate and determine acceptability of substitute materials and equipment proposed by Contractor(s).
5. The ENGINEER will establish baselines for locating the work together with a suitable number of benchmarks adjacent to the work as shown in the contract documents.
6. The ENGINEER will provide general engineering review of the work of the Contractor(s) as construction progresses to ascertain that the Contractor is conforming with the design concept.
 - (a) ENGINEER shall have authority, as the OWNER's representative, to require special inspection of or testing of the work, and shall receive and review all certificates of inspections, testing and approvals required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents (but only to determine generally that their content complies with requirements of, and the results certified indicate compliance with, the Contract Documents).

(Section B – Continued)

- (b) During such engineering review, ENGINEER shall have the authority, as the OWNER's representative, to disapprove of or reject Contractor(s)' work while it is in progress if ENGINEER believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the Project as reflected in the Contract Documents.
- (c) The ENGINEER will attend construction conferences with the OWNER, the Contractor, or other interested parties as may be reasonably necessary, including:
- i. One (1) Pre-Construction Meeting
 - ii. Three (3) Construction Progress Meetings
7. The ENGINEER will provide part-time (average 10 hours per week over a 3-month construction period) resident construction observation. Resident construction observation shall consist of visual inspection of materials, equipment, or construction work for the purpose of ascertaining that the work is in substantial conformance with the contract documents and with the design intent. Such observation shall not be relied upon by others as acceptance of the work. The ENGINEER's undertaking hereunder shall not relieve the Contractor of Contractor's obligation to perform the work in conformity with the drawings and specifications and in a workmanlike manner; shall not make the ENGINEER an insurer of the Contractor's performance; and shall not impose upon the ENGINEER any obligation to see that the work is performed in a safe manner. Attachment D - The Limitations of Authority, Duties and Responsibilities of the Resident Construction Observer is attached to this Agreement.
8. The ENGINEER will cooperate and work closely with representatives of the OWNER.
9. Based on ENGINEER's on-site observations as an experienced and qualified design professional, on information provided by the Resident Construction Observer, and upon review of applications for payment with the accompanying data and schedules by the Contractor, the ENGINEER:
- (a) Shall review Contractors payment requests and supporting documentation (including certified payroll documentation that certifies prevailing wage requirements are being met), determine the amounts owing to Contractor(s) and recommend in writing payments to Contractor(s) in such amounts. Such recommendations of payment will constitute a representation to OWNER, based on such observations and review, that the work has progressed to the point indicated, and that, to the best of the ENGINEER's knowledge, information and belief, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a

(Section B – Continued)

functioning whole prior to or upon substantial completion, to the results of any subsequent tests called for in the Contract Documents, and to any other qualifications stated in the recommendation). By recommending any payment, ENGINEER will not hereby be deemed to have represented that exhaustive, continuous or detailed reviews or examinations have been made by ENGINEER to check the quality or quantity of Contractor(s)' work as it is furnished and performed beyond the responsibilities specifically assigned to ENGINEER in the Agreement and the Contract Documents. ENGINEER's review of Contractor(s)' work for the purposes of recommending payments will not impose on Engineer responsibility to supervise, direct or control such work or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto or Contractor(s) compliance with laws, rules, regulations, ordinances, codes or orders applicable to their furnishing and performing the work. It will also not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes any Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any of the work, materials equipment has passed to OWNER free and clear of any lien, claims, security interests, or encumbrances, or that there may not be other matters at issue between OWNER and Contractor that might affect the amount that should be paid.

10. The ENGINEER will prepare necessary contract change orders for approval of the OWNER in accordance with the timeline defined by the OWNER.
11. The ENGINEER shall act as initial interpreter of the requirements of the Contract Documents and judge the acceptability of the work thereunder and make decisions on all claims of OWNER and Contractor(s) relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work. ENGINEER shall not be liable for the results of any such interpretations or decisions rendered in good faith or inconsistent with reasonable and sound engineering practices.
12. The ENGINEER will make a final review prior to the issuance of the statement of substantial completion of all construction and submit a written report to the OWNER. Prior to submitting the final pay estimate, the ENGINEER shall submit the statement of completion to and obtain the written acceptance of the facility from the OWNER.
13. The ENGINEER will provide the OWNER with one set of reproducible record (as-built) drawings, and two sets of prints at no additional cost to the OWNER. Such drawings will be based upon construction records provided by the contractor during construction and reviewed by the resident construction observer and from the resident construction observer's construction data.

(Section B – Continued)

14. If State Statutes require notices and advertisements of final payment, the ENGINEER shall assist in their preparation.
15. The ENGINEER will be available to furnish engineering services and consultations necessary to correct unforeseen project operation difficulties for a period of one year after the date of statement of substantial completion of the facility. This service will include instruction of the OWNER in initial project operation and maintenance but will not include supervision of normal operation of the system. In the event the ENGINEER is requested to provide such services, the ENGINEER shall be additionally compensated as set out in Section D hereof. The ENGINEER will assist the OWNER in performing a review of the project during the 11th month after the date of the certificate of substantial completion.
16. The ENGINEER further agrees to obtain and maintain, at the ENGINEER's expense, such insurance as will protect the ENGINEER from claims under the Workman's Compensation Act and such comprehensive general liability insurance as will protect the OWNER and the ENGINEER from all claims for bodily injury, death, or property damage which may arise from the performance by the ENGINEER or by the ENGINEER's employees of the ENGINEER's functions and services required under this Agreement. The ENGINEER further agrees to maintain professional liability insurance, at the ENGINEER's expense, such insurance will protect the OWNER from all claims for errors and omissions in connection with the professional services to be provided under this contract.
17. The ENGINEER will provide Professional Construction Engineering Services on the project in accordance with the periods summarized in Attachment C: "Schedule of Work - Basin Eastern 2 – 2020 Manhole Rehabilitation – Construction Engineering" dated August 24, 2020.

If the above is not accomplished within the time period specified, this Agreement may be terminated by the OWNER. The time for completion may be extended by the OWNER for a reasonable time if completion is delayed due to unforeseeable cases beyond the control and without the fault or negligence of the ENGINEER

SECTION C – COMPENSATION FOR ENGINEERING SERVICES

1. The OWNER shall compensate the ENGINEER for the design and construction engineering services for the Hourly Not To Exceed amount of Sixty-Seven Thousand Four Hundred Twenty-Nine Dollars (\$67,429) as summarized in Attachment B: "Level of Effort and Associated Cost" dated August 24, 2020.
2. The compensation for any additional engineering services authorized by the OWNER pursuant to Section D shall be payable as follows:

(Section C – Continued)

- (a) A sum which equals any charges for work actually completed and invoiced shall be paid at least once per month.

SECTION D – ADDITIONAL ENGINEERING SERVICES

In addition to the foregoing being performed, the following services may be provided UPON PRIOR WRITTEN AUTHORIZATION OF THE OWNER.

1. Laboratory tests, well tests, test wells, specialized geological soils, hydraulic, or other studies recommended by the ENGINEER.
2. Property surveys, detailed description of sites, maps, drawings, or estimates related thereto; assistance in negotiating for land and easement rights.
3. Necessary data and filing maps for litigation, such as condemnation.
4. Redesigns ordered by the OWNER after final plans have been accepted by the OWNER and IEPA.
5. Appearances before courts or boards on matters of litigation or hearings related to the project. Notwithstanding the above, Owner shall have no obligation to pay for said services should said litigation, hearing or arbitration have been brought on account of ENGINEER's negligent acts.
6. Preparation of environmental impact assessments or environmental impact statements.
7. Making drawings from field measurements of existing facilities when required for planning additions or alterations thereto.
8. Services due to changes in the scope of the Project or its design, including but not limited to, changes in size, complexity, schedule, or character of construction.
9. Revising studies or reports which have previously been approved by the OWNER, or when revisions are due to cases beyond the control of the ENGINEER.
10. Preparation of design documents for alternate bids where major changes require additional documents. Major changes shall be generally defined as alternate bids that would require additional design documentation within the plan set (i.e. additional plan views, section views and/or details).

(Section D – Continued)

11. Preparation of detailed renderings exhibits or scale models for the Project.
12. Providing special analysis of the OWNER's needs such as owning and operating analysis, plan for operation and maintenance, OWNER's special operating drawings or charts, and any other similar analysis.
13. The preparation of feasibility studies, appraisals and evaluations, detailed quantity surveys of material and labor, and material audits or inventories by the OWNER.
14. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) defective or incomplete work of the Contractor, and/or (3) the Contractor's default on the Construction Contract due to delinquency or insolvency.
15. Providing design services relating to future facilities, systems and equipment which are not intended to be constructed or operated as a part of the Project.
16. Providing other services not otherwise provided for in this Agreement, including services normally furnished by the OWNER as described in Section F – SPECIAL PROVISIONS – Owner's Responsibilities.

Payment for the services specified in this Section D shall be as agreed in writing between the OWNER and the ENGINEER prior to commencement of the work. The ENGINEER will render to OWNER for such services an itemized bill, separate from any other billing, once each month, for compensation for services performed hereunder during such period, the same to be due and payable by OWNER to the ENGINEER 30 days after the bill has been received and approved. Payment for services noted in this Section D shall be at Actual Cost (AC), Fixed Fee (FF) or Hourly (HR).

SECTION E - INTEREST ON UNPAID SUMS

OWNER shall make all payments to ENGINEER in accord with the requirements of the Illinois Local Government Prompt Payment Act, 50 ILCS 505/1 et seq., including but not limited to the penalty provisions contained therein.

SECTION F - SPECIAL PROVISIONS

1. OWNER'S RESPONSIBILITIES
 - (a) Provide to the ENGINEER all criteria, design and construction standards and full information as to the OWNER's requirements for the Project.

(Section F – Continued)

- (b) Designate a person authorized to act as the OWNER's representative. The OWNER or his representative shall receive and examine documents submitted by the ENGINEER, interpret, and define the OWNER's policies and render decisions and authorizations in writing promptly to prevent unreasonable delay in the progress of the ENGINEER's services.
- (c) Furnish laboratory tests, air and water pollution tests, reports and inspections of samples, materials or other items required by law or by governmental authorities having jurisdiction over this Project, or as recommended by the ENGINEER.
- (d) Provide legal, accounting, right-of-way acquisition and insurance counseling services necessary for the Project, legal review of the construction Contract Documents, and such auditing services as the OWNER may require to account for expenditures of sums paid to the Contractor.
- (e) Furnish above services at the OWNER's expense and in such manner that the ENGINEER may rely upon them in the performance of his services under this Agreement and in accordance with the Project timetable.
- (f) In the event that the OWNER shall bring any suit, cause of action or counterclaim against the ENGINEER, to the extent that the ENGINEER shall substantially prevail, the party initiating such action shall pay to the ENGINEER the cost and expenses incurred to answer and/or defend such action, including reasonable attorney fees and court costs. In the event that the ENGINEER shall bring any suit, cause of action or counterclaim against the OWNER, to the extent that the OWNER shall substantially prevail, the party initiating such action shall pay to the OWNER the cost and expenses incurred to answer and/or defend such action, including reasonable attorney fees and court costs. In no event shall the ENGINEER or OWNER indemnify any other party for the consequences of that party's negligence, including failure to follow that party's recommendations and direction. In the event a party does not substantially prevail against the other, each party shall pay its own costs, expenses, and reasonable attorney fees.
- (g) Guarantee full and free access for the ENGINEER to enter upon all property required for the performance of the ENGINEER's services under this Agreement.
- (h) Give prompt written notice to the ENGINEER whenever the OWNER observes or otherwise becomes aware of any defect in the Project or other event which may substantially affect the ENGINEER's performance of services under this Agreement.

(Section F – Continued)

- (i) Protect and preserve all survey stakes and markers placed at the project site prior to the assumption of this responsibility by the Contractor and bear all costs of replacing stakes or markers damaged or removed during said time interval.

2. All original documents, including but not limited to ideas, designs, drawings, and specifications, are to remain the property of the ENGINEER, however, the ENGINEER shall provide signed duplicate originals of same to the OWNER. Modifications of any signed duplicate original document not authorized by ENGINEER will be at OWNER's sole risk and without legal liability to the ENGINEER. Use of any incomplete, unsigned document will, likewise, be at the OWNER's sole risk and without legal liability to the ENGINEER.

3. Delegation of Duties - Neither the OWNER nor the ENGINEER shall delegate his duties under this Agreement without the written consent of the other.

4. Extent of Agreement - This Agreement represents the entire and integrated Agreement between the OWNER and the ENGINEER and supersedes all prior negotiations, representations, or agreement, either written or oral. This Agreement may be amended only by written instrument signed by the OWNER and the ENGINEER.

5. Governing Law - Unless otherwise specified within this Agreement, this Agreement shall be governed by the law of the State of Illinois in the Counties of Kane and DuPage.

6. In the event any provisions of this Agreement shall be held to be invalid and unenforceable, the remaining provisions shall be valid and binding upon the parties.

7. The ENGINEER has not been retained or compensated to provide design services relating to the Contractor's safety precautions or to means, methods, techniques, sequences, or procedures required by the Contractor to perform his work but not relating to the final or completed structure; omitted services include but are not limited to shoring, scaffolding, underpinning, temporary retainment of excavations and any erection methods and temporary bracing.

8. The ENGINEER shall render his services under this Agreement in accordance with generally accepted professional practices for the intended use of the Project.

(Section F – Continued)

9. Since the ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s) methods of determining prices, or over competitive bidding or market conditions, his opinions of probable Project Costs and Construction Costs provided for herein are to be made on the basis of his experience and qualifications and represent his best judgment as an experienced and qualified professional engineer, familiar with the construction industry; but the ENGINEER cannot and does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost prepared by him. If prior to the bidding or negotiating phase OWNER wishes greater assurance as to project or construction costs he shall employ an independent cost estimator.

10. TERMINATION

(a) Should the OWNER decide to abandon, discontinue, or terminate the Project at any stage of development, the ENGINEER shall receive seven (7) days written notice and be compensated for their services through the appropriate fee schedule provided for in the Agreement to date of abandonment, discontinuance or termination.

(b) In the event the project is delayed for causes beyond the control of the ENGINEER for a period of six months or more, the ENGINEER shall be paid for his services to the beginning of the delay on the basis of actual cost– “actual cost” being defined as material costs plus actual payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expense will be reimbursed to the ENGINEER at his actual cost.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate on the respective dates indicated below.

(SEAL) OWNER: City of St. Charles

By _____

ATTEST _____ Print Name _____

Print Name _____ Title _____

Title _____ Date _____

(SEAL)

ENGINEER: Engineering Enterprises, Inc.

By Jeffrey W. Freeman

ATTEST Angie Smith Print Name Jeffrey W. Freeman, P.E., CFM, LEED AP

Print Name Angie Smith Title Chief Executive Officer

Title Administrative Assistant Date _____

ENGINEERING ENTERPRISES, INC.
CONSULTING ENGINEERS

DATE:	8/27/2020
ENTERED BY:	KEP

**ATTACHMENT B:
ESTIMATE OF LEVEL OF EFFORT AND ASSOCIATED COST
PROFESSIONAL ENGINEERING SERVICES**

Basin Eastern 2 - 2020 Manhole Rehabilitation
City of St. Charles, Kane & DuPage Cos., IL

WORK ITEM NO.	WORK ITEM	ENTITY: EEI						WORK ITEM HOUR SUMM.	COST PER ITEM	
		PROJECT ROLE:	PRINCIPAL IN CHARGE	PROJECT MANAGER	PROJECT ENGINEER	SENIOR PROJECT TECHN.	PROJECT TECHN.			ADMIN.
		HOURLY RATE:	\$209	\$183	\$145	\$158	\$133			\$70
PROJECT FACILITATION & MEETINGS										
1.1	Project Administration		1	3				4	\$ 758	
1.2	Project Initiation & Design Progress Review Meetings (2 Meetings Total)		6	8	8			3	\$ 4,088	
Project Facilitation & Meetings Subtotal:			7	11	8	-	-	3	\$ 4,846	
MANHOLE REHABILITATION DESIGN ENGINEERING										
2.1	Evaluate Manhole Rehab Alternatives		1	4	8			13	\$ 2,101	
2.2	Prepare Base Exhibits			1	12	1	6	20	\$ 2,879	
2.3	Prepare Draft Front End Documents			8	20			28	\$ 4,364	
2.4	Prepare Draft Technical Specifications			4	12			16	\$ 2,472	
2.5	Prepare Draft Bid Schedule			1	6			7	\$ 1,053	
2.6	Prepare Engineer's Estimate		1	1	6			8	\$ 1,262	
2.7	Complete Draft Project Manual		1	1	6		1	10	\$ 1,465	
2.8	Coordinate Review and Approval with City			2	4			6	\$ 946	
2.9	Finalize Project Manual			2	6		1	10	\$ 1,439	
2.10	Attend Pre-Bid Meeting			3	4			7	\$ 1,129	
2.11	Respond to Inquiries, Prepare and Distribute Addenda, etc.			4	4		1	9	\$ 1,382	
2.12	Attend Bid Opening, Review Bids, Prepare Bid Tabulation			3	3			6	\$ 984	
Manhole Rehabilitation Design Engineering Subtotal:			3	34	91	1	8	3	\$ 21,476	
CONSTRUCTION ENGINEERING										
3.1	Communication and Project Administration		1	4				5	\$ 941	
3.2	Attend Pre-Construction Meeting and Construction Progress Meeting (Bi-weekly)		6	12	16			34	\$ 5,770	
3.3	Review Pay Applications		1	4	8			13	\$ 2,101	
3.4	Review Shop Drawings, Manhole Inspection Reports and RFI's		1	12	20			33	\$ 5,305	
3.5	Construction Observation (Part-Time for 3-Months) and Punchlist		1	24	140		8	173	\$ 24,901	
CONSTRUCTION ENGINEERING Subtotal:			10	56	184	-	8	-	\$ 39,018	
PROJECT TOTAL:			20	101	283	1	16	6	\$ 65,340	

DIRECT EXPENSES	
Printing =	\$ 525
Mileage =	\$ 500
N/A	\$ -
DIRECT EXPENSES =	\$ 1,025

LABOR EXPENSES	
Engineering Expenses =	\$ 63,698
Surveying, Drafting & GIS Technician Expenses =	\$ 2,286
Administrative Expenses =	\$ 420
TOTAL LABOR EXPENSES =	\$ 66,404
TOTAL COSTS =	\$ 67,429

ATTACHMENT D

to

Agreement for Professional Engineering Services

THE LIMITATIONS OF AUTHORITY, DUTIES AND RESPONSIBILITIES OF THE RESIDENT CONSTRUCTION OBSERVER ARE AS FOLLOWS:

1. The Resident Construction Observer shall act under the direct supervision of the ENGINEER, shall be the ENGINEER's agent in all matters relating to on-site construction review of the Contractor's work, shall communicate only with the ENGINEER and the Contractor (or Contractors), and shall communicate with subcontractors only through the Contractor or his authorized superintendent. The OWNER shall communicate with the Resident Construction Observer only through the ENGINEER.
2. The Resident Construction Observer shall review and inspect on-site construction activities of the Contractor relating to portions of the Project designed and specified by the Engineer as contained in the Construction Contract Documents.
3. Specifically omitted from the Resident Construction Observer's duties are any review of the Contractor's safety precautions, or the means, methods, sequences, or procedures required for the Contractor to perform the work but not relating to the final or completed Project. Omitted design or review services include but are not limited to shoring, scaffolding, underpinning, temporary retainment of excavations and any erection methods and temporary bracing.
4. The specific duties and responsibilities of the Resident Construction Observer are enumerated as follows:
 - (a) Schedules: Review the progress schedule, schedule of Shop Drawing submissions and schedule of values prepared by Contractor and consult with ENGINEER concerning their acceptability.
 - (b) Conferences: Attend preconstruction conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with ENGINEER and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.
 - (a) Liason:
 - (1) Serve as ENGINEER's liaison with Contractor, working principally through Contractor's superintendent and assist him in understanding the intent of the Contract Documents.

(Attachment D – Continued)

- (2) Assist ENGINEER in serving as OWNER's liaison with Contractor when Contractor's operations affect OWNER's on-site operations.
 - (3) As requested by ENGINEER, assist in obtaining from OWNER additional details or information, when required at the job site for proper erection of the work.
- (d) Shop Drawings and Samples:
- (1) Receive and record date of receipt of Shop Drawings and samples.
 - (2) Receive samples which are furnished at the site by Contractor, and notify ENGINEER of their availability for examination.
 - (3) Advise ENGINEER and Contractor or its superintendent immediately of the commencement of any work requiring a Shop Drawing or sample submission if the submission has not been approved by ENGINEER.
- (e) Review of Work, Rejection of Defective Work, Inspections and Tests:
- (1) Conduct on-site inspection of the work in progress to assist ENGINEER in determining if the work is proceeding in accordance with the Contract Documents and that completed work will conform to the Contract Documents.
 - (2) Report to ENGINEER whenever he believes that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspections, test or approval required to be made or has been damaged prior to final payment; and advise ENGINEER when he believes work should be corrected or rejected or should be uncovered for inspection, or requires special testing, inspection or approval.
 - (3) Verify that tests, equipment and systems start-ups, and operating and maintenance instructions are conducted as required by the Contract Documents and in presence of the required personnel, and that Contractor maintains adequate records thereof; observe, record and report to ENGINEER appropriate details relative to the test procedures and start-ups.

(Attachment D – Continued)

- (4) Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the outcome of these inspections and report to ENGINEER.

- (f) Interpretation of Contract Documents: Transmit to Contractor ENGINEER's clarifications and interpretations of the Contract Documents.

- (g) Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report them with recommendations to ENGINEER.

- (h) Records:
 - (1) Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and samples submissions, reproductions of original Contract Documents including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.

 - (2) Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. Send copies to ENGINEER.

 - (3) Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.

- (i) Reports:
 - (1) Furnish ENGINEER periodic reports as required of progress of the work and Contractor's compliance with the approved progress schedule and schedule of Shop Drawing submissions.

 - (2) Consult with ENGINEER in advance of schedule major tests, inspections or start of important phases of the work.

(Attachment D – Continued)

- (3) Report immediately to ENGINEER upon the occurrence of any accident.

- (j) Payment Requisitions: Review applications for payment with Contractor for compliance with the established procedure for their submission and forward them with recommendations to ENGINEER, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.

- (k) Certificates, Maintenance and Operating Manuals: During the course of the work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed; and deliver this material to ENGINEER for his review and forwarding to OWNER prior to final acceptance of the work.

- (l) Completion:
 - (1) Before ENGINEER issues a Statement of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.

 - (2) Conduct final review in the company of ENGINEER, OWNER and Contractor and prepare a final list of items to be completed or corrected.

 - (3) Verify that all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance.



Standard Schedule of Charges

January 1, 2020

EMPLOYEE DESIGNATION	CLASSIFICATION	HOURLY RATE
Senior Principal	E-4	\$214.00
Principal	E-3	\$209.00
Senior Project Manager	E-2	\$203.00
Project Manager	E-1	\$183.00
Senior Project Engineer/Planner/Surveyor II	P-6	\$172.00
Senior Project Engineer/Planner/Surveyor I	P-5	\$160.00
Project Engineer/Planner/Surveyor	P-4	\$145.00
Senior Engineer/Planner/Surveyor	P-3	\$133.00
Engineer/Planner/Surveyor	P-2	\$121.00
Associate Engineer/Planner/Surveyor	P-1	\$109.00
Senior Project Technician II	T-6	\$158.00
Senior Project Technician I	T-5	\$145.00
Project Technician	T-4	\$133.00
Senior Technician	T-3	\$121.00
Technician	T-2	\$109.00
Associate Technician	T-1	\$ 96.00
GIS Technician	G-1	\$ 90.00
Engineering/Land Surveying Intern	I-1	\$ 79.00
Administrative Assistant	A-3	\$ 70.00

VEHICLES, REPROGRAPHICS, DIRECT COSTS, DRONE AND EXPERT TESTIMONY

Vehicle for Construction Observation		\$ 15.00
In-House Scanning and Reproduction	\$0.25/Sq. Ft. (Black & White) \$1.00/Sq. Ft. (Color)	
Reimbursable Expenses (Direct Costs)	Cost	
Services by Others (Direct Costs)	Cost + 10%	
Unmanned Aircraft System / Unmanned Aerial Vehicle / Drone		\$ 200.00
Expert Testimony		\$ 250.00

