AGREEMENT For PROFESSIONAL ENGINEERING SERVICES Between THE CITY OF COLUMBIA, MISSOURI And TREKK DESIGN GROUP, LLC.

THIS AGREEMENT by and between the City of Columbia, Missouri (hereinafter called "City"), and TREKK Design Group, LLC (hereinafter called "Engineer"), is entered into on the date of the last signatory noted below (the "Effective Date").

WITNESSETH, that whereas City intends to make improvements as described below, hereinafter called the Project, consisting of the following:

Review hydraulic model, update assumptions, integrate new data, and conduct four workshops to train City staff on model use, calibration and capacity analysis. Engineer will complete flow metering for a 90 day period in selected structures to address hydraulic model calibrations. Data will be shared with the City in a spreadsheet format and will be incorporated into the model during one of the workshops.

(Description of Project)

NOW, THEREFORE, in consideration of the mutual covenants set out herein the parties agree as follows:

Engineer shall serve as City's professional engineering, surveying or architecture contractor in those assignments to which this Agreement applies, and shall give consultation and advice to City during the performance of the services. All services shall be performed under the direction of a professional engineer, professional land surveyor or architect registered in the State of Missouri and gualified in the particular field.

SECTION 1 - AUTHORIZATION OF SERVICES

1.1 Engineer shall not undertake to begin any of the services contemplated by this agreement until directed in writing to do so by City. City may elect to authorize the Project as a whole or in parts.

1.2 Authorized work may include services described hereafter as Basic Services or as Additional Services of Engineer.

SECTION 2 - BASIC SERVICES OF ENGINEER

2.1 General

2.1.1 Perform professional engineering services as set forth in Exhibit A - "Scope of Basic Services," dated **February 21**, **2025** (hereinafter referred to as "Scope of Basic Services").

2.1.2 Engineer will designate the following listed individuals as its project team with responsibilities as assigned. Engineer shall dedicate whatever additional resources are necessary to accomplish the Project within the specified time frame but will not remove these individuals from the assigned tasks for any reason within the control of Engineer without the written approval of City.

Name and TitleAssignmentDustin Hill, P.E.Project Manager

All of the services required hereunder will be performed by Engineer or under its supervision and all personnel engaged in the work shall be fully qualified and authorized or permitted under state and local law to perform such services.

None of the work or services covered by this Agreement shall be subcontracted without the prior written approval of City and any work or services so subcontracted shall be subject to the provisions of this Agreement.

2.2 Engineer shall furnish such periodic reports as City may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred, and any other matters covered by this Agreement.

2.3 Engineer shall maintain accounts and records, including personnel, property and financial records, adequate to identify and account for all costs pertaining to the Agreement and any other records as deemed necessary by City to assure proper accounting for all project funds. These records must be available to City or its authorized representatives, for audit purposes, and must be retained for three (3) years after expiration or completion of this Agreement.

SECTION 3 - ADDITIONAL SERVICES OF ENGINEER

3.1 General

If authorized in writing by City, and agreed to in writing by Engineer, Engineer shall furnish or obtain from others Additional Services of the following types which are not considered normal or customary Basic Services. The scope of Additional Services may include: 3.1.1 Financial Consultation

Consult with City's fiscal agents and bond attorneys and provide such engineering data as required for any bond prospectus or other financing requirements.

3.1.2 Property Procurement Assistance

Provide consultation and assistance on property procurement as related to professional engineering services being performed.

3.1.3 Obtaining Services of Others

Provide through subcontract the services or data set forth in Scope of Basic Services. Engineer is prohibited from holding a retainage on any payment to a subcontractor that provides any services or work on this Project.

3.1.4 Preliminary or final engineering design of capital facilities except as specifically identified herein.

3.1.5 Preparation of reports, data, application, etc., in connection with modifications to FEMA floodplain definition and/or mapping.

3.1.6 Extra Services

Services not specifically defined heretofore that may be authorized in writing by City.

SECTION 4 - RESPONSIBILITIES OF City

4.1 Provide full information as to City's requirements for the Project.

4.2 Assist Engineer by placing at Engineer's disposal available information pertinent to the assignment including previous reports and other data relative thereto, including the items outlined in Scope of Basic Services.

4.3 Guarantee access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform Engineer's services under this Agreement.

4.4 Examine all studies, reports, sketches, estimates, Bid Documents, Drawings, proposals and other documents presented by Engineer and render in writing decisions pertaining thereto.

4.5 Provide such professional legal, accounting, financial and insurance counseling services as may be required for the Project.

4.6 Designate **Justin Fessler**, as City's representative with respect to the services to be performed under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to materials, equipment, elements and systems to be used in

the Project, and other matters pertinent to the services covered by this Agreement. The City's designated representative may be changed during the duration of this Agreement by written notice from the City Manager, or City Manager's designee, to Engineer.

4.7 Give prompt written notice to Engineer whenever City observes or otherwise becomes aware of any defect in the Project.

4.8 Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

4.9 Furnish Engineer data such as probings and subsurface explorations, with appropriate professional interpretations; property, boundary, easement, right-of-way, topographic and utility surveys; zoning and deed restriction; and other special data or consultations, all of which Engineer may rely upon in performing his services under this Agreement.

SECTION 5 - PERIOD OF SERVICE

5.1 This Agreement will become effective upon the first written notice by City authorizing services hereunder.

5.2 This Agreement shall be applicable to all work assignments authorized by City subsequent to the date of its execution and shall be effective as to all assignments authorized.

5.3 Services shall be started within 10 calendar days of Notice to Proceed and completed within **250** calendar days from the issuance of the Notice to Proceed. City shall have the right to establish performance times for individual phases or elements of the Project by delivering a written schedule setting out the performance times to the Engineer.

SECTION 6 - PAYMENTS TO ENGINEER

6.1 Amount of Payment

6.1.1 For services performed, City shall pay Engineer the sum of amounts determined as follows:

6.1.1.1 For time spent by personnel, payment at the hourly rates indicated in the "Schedule of Hourly Labor Billing Rates" (attached). Such rates include overhead and profit. The schedule may be revised annually if the term of this Agreement exceeds one (1) year. To be effective, any revision in the Schedule of Hourly Labor Billing Rates shall be provided by Engineer to City as least thirty (30) days prior to work performed under this Agreement to which such rates apply.

6.1.1.2 For outside expenses incurred by Engineer, such as authorized travel and subsistence, commercial services, and incidental expenses, the cost to Engineer.

6.1.1.3 For reproduction, printing, long-distance telephone calls, company vehicle usage, testing apparatus, computer services and computer-assisted drafting (CAD), amounts will be charged according to the Engineer's standard rates in effect at the time service is provided.

6.1.1.4 For professional services rendered by others as subcontractor(s) to Engineer such as surveying, real property descriptions, soil borings, subsurface investigations, laboratory testing, field quality control tests, progress photos, or other activities required or requested by City, will be billed at the cost to Engineer.

6.1.1.5 For time spent by outside individual professional consultants employed by Engineer in providing services to City, the cost to Engineer. Expenses incurred by such outside consultants in service to City shall be reimbursable in accordance with 6.1.1.2 above.

6.1.1.6 Total payment for Scope of Basic Services and all other expenses and costs to City under this Agreement and described herein **shall not exceed \$142,720.00**.

6.2 Payments

6.2.1 Engineer shall submit an invoice for services rendered to City not more than once every month. Upon receipt of the invoice and progress report, City will, as soon as practical, pay Engineer for the services rendered, provided City does not contest the invoice.

SECTION 7 - GENERAL CONSIDERATIONS

7.1 Insurance

7.1.1 ENGINEER'S INSURANCE: Engineer agrees to maintain, on a primary basis and at its sole expense, at all times during the life of this contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Engineer is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by Engineer under this contract.

<u>Commercial General Liability</u> Engineer agrees to maintain Commercial General Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate covering both bodily injury and property damage, including accidental death. Coverage shall not contain any endorsement(s) excluding nor limiting Contractual Liability or Cross Liability. If the contract involves any underground/digging operations, the general liability certificate shall include X, C and U (Explosion, Collapse and Underground) coverage.

Professional Liability Engineer agrees to maintain Professional (Errors & Omissions) Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate. For policies written on a "Claims-Made" basis, Engineer agrees to maintain a Retroactive Date prior to or equal to the Effective Date of this contract. In the event the policy is canceled, non- renewed, switched to an Occurrence Form, retroactive date advanced; or any other event triggering the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this contract, Engineer agrees to purchase a SERP with a minimum reporting period not less than two **(2)** years. The requirement to purchase a SERP shall not relieve Engineer of the obligation to provide replacement coverage.

Business Automobile Liability Engineer agrees to maintain Business Automobile Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Engineer's own automobiles, and trucks; hired automobiles, and trucks; and automobiles both on and off the site of work. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event Engineer does not own automobiles, Engineer agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

<u>Workers' Compensation Insurance & Employers' Liability</u> Engineer agrees to take out and maintain during the life of this contract, Employers' Liability and Workers' Compensation Insurance for all of their employees employed at the site of the work, and in case any work is sublet, the Engineer shall require the subcontractor similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the Engineer. Workers' Compensation coverages shall meet Missouri statutory limits. Employers' Liability minimum limits shall be \$500,000 each employee, \$500,000 each accident and \$500,000 policy limit. In case any class of employees engaged in hazardous work under this contract is not protected under the Workers' Compensation Statute, the Engineer shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

Excess/Umbrella Liability The above liability limits may be satisfied by any combination of primary and excess/umbrella liability policies.

<u>Additional Insured</u> Engineer agrees to endorse City as an Additional Insured with a CG 2026 Additional Insured – Designated Person or Organization endorsement, or similar endorsement, to the Commercial General Liability. The Additional Insured shall read "City of Columbia."

<u>Waiver of Subrogation</u> Engineer agrees by entering into this contract to a Waiver of Subrogation for each required policy herein except professional liability. When required by the insurer, or should a policy condition not permit Engineer to enter into an pre-loss agreement to waive subrogation without an endorsement, then Engineer agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should Engineer enter into such an agreement on a preloss basis.

<u>Certificate(s) of Insurance</u> Engineer agrees to provide City with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect. Said Certificate(s) of Insurance shall include a minimum thirty (30) day endeavor to notify due to cancellation or non-renewal of coverage. The Certificate(s) of Insurance shall name the City as additional insured in an amount as required in this contract and contain a description of the project or work to be performed.

<u>**Right to Revise or Reject</u>** City reserves the right, but not the obligation, to review and revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work / specifications affecting the applicability of coverage. Additionally, City reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein or any insurer providing coverage due of its poor financial condition or failure to operating legally.</u>

7.1.2 HOLD HARMLESS AGREEMENT: To the fullest extent not prohibited by law, Engineer shall indemnify and hold harmless the City of Columbia, its directors, officers, agents and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any negligent act or failure to act, or willful misconduct, of Engineer, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with Engineer or a subcontractor for part of the services), of anyone directly or indirectly employed by Engineer or by any subcontractor, or of anyone for whose acts Engineer or its subcontractor may be liable, in connection with providing these services except as provided in this Agreement. This provision does not, however, require Engineer to indemnify, hold harmless or defend the City of Columbia from its own negligence, except as set out herein.

7.2 Professional Responsibility

7.2.1 Missouri Licensure & Certificate of Authority

Engineer certifies that it is currently in compliance, and agrees to maintain compliance for the duration of this Agreement, with all licensure requirements of the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects (hereinafter "APEPLSPLA") to practice in Missouri as a professional engineer as provided under chapter 327 of the Missouri Revised Statutes. To the extent required by Section 327.401 of the Missouri Revised Statutes, Engineer understands and agrees that the person personally in charge and supervising the professional engineering services of Engineer under this Agreement shall be licensed and authorized to practice engineering in Missouri, and that Engineer will keep and maintain a valid certificate of authority from APEPLSPLA.

7.2.2 Engineer will exercise reasonable skill, care, and diligence in the performance of its services and will carry out its responsibilities in accordance with customarily accepted good professional engineering practices. If Engineer fails to meet the foregoing standard, Engineer will perform at its own cost, and without reimbursement from City, the professional engineering services necessary to correct errors and omissions which are caused by Engineer's failure to comply with above standard, and which are reported to Engineer within one year from the completion of Engineer's services for the Project.

7.2.3 In addition, Engineer will be responsible to City for damages caused by its negligent conduct during its activities at the Project site or in the field.

7.2.4 Professional Oversight Indemnification

Engineer understands and agrees that City has contracted with Engineer based upon Engineer's representations that Engineer is a skilled professional and fully able to provide the services set out in this Agreement. In addition to any other indemnification set out in this Agreement, Engineer agrees to defend, indemnify and hold and save harmless City from any and all claims, settlements and judgments whatsoever arising out of City's alleged negligence in hiring or failing to properly supervise Engineer. Engineer agrees to provide City with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements are maintained and in full force and effect.

7.3 Estimates and Projections

Estimates and projections prepared by Engineer relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are based on Engineer's experience, qualifications and judgment as a design professional. Since Engineer has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractor's procedures and methods, unavoidable delays, construction contractor's methods of determining prices, economic conditions, competitive bidding or market conditions and other factors affecting such estimates or projections, Engineer does not guarantee that actual rates, costs, performance, schedules, etc., will not vary from estimates and projections prepared by Engineer.

7.4 On-Site Services

Project site visits by Engineer during construction shall not make Engineer responsible for construction means, methods, techniques, sequences or procedures; for construction safety precautions or programs; or for any construction contractor(s') failure to perform its work in accordance with the plans and specifications.

7.5 Changes

City shall have the right to make changes within the general scope of Engineer's services, with an appropriate change in compensation and/or schedule, upon execution of a mutually acceptable amendment or change order signed by an authorized representative of City and the President or any Vice President of Engineer.

7.6 Suspension of Services

Should City fail to fulfill its responsibilities as provided under Section 4 to the extent that Engineer is unduly hindered in Engineer's services or if City fails to make any payment to Engineer on account of its services and expenses within ninety (90) days after receipt of Engineer's bill therefor, Engineer may, after giving seven (7) days' written notice to City, suspend services under this Agreement until City has satisfied his obligations under this Agreement.

7.7 Termination

Services may be terminated by the City at any time and for any reason, and by Engineer in the event of substantial failure to perform in accordance with the terms hereof by City through no fault of Engineer, by ten (10) days' notice. If so terminated, City shall pay Engineer all uncontested amounts due Engineer for all services properly rendered and expenses incurred to the date of receipt of notice of termination.

7.7.1 In the event of City's termination of this Agreement pursuant to the above section, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared under this Agreement, shall at the option of City become its property.

Further, Engineer shall not be relieved of any liability to City for any damages sustained by City by virtue of any breach of this Agreement by Engineer and City may withhold any payments due Engineer for the purpose of set-off until such time as the exact amount of damages to City, if any, is determined.

7.8 Publications

Recognizing the importance of professional development on the part of Engineer's employees and the importance of Engineer's public relations, Engineer may prepare publications, such as technical papers, articles for periodicals, and press releases, pertaining to Engineer's services for the Project. Such publications will be provided to City in draft form for City's advance review. City will review such drafts promptly and will provide comments to Engineer. City may require deletion of proprietary data or confidential information from such publications but otherwise will not unreasonably withhold its approval. The cost of Engineer's activities pertaining to any such publication shall be paid entirely by Engineer.

7.9 Nondiscrimination

During the performance of this Agreement, Engineer agrees to the following:

7.9.1 Engineer shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, or gender identity. Engineer shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. Engineer agrees to post notices in conspicuous places, available to employees and applicants for employment.

7.9.2 Engineer shall, in all solicitation or advertisements for employees placed by or on behalf of Engineer, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law.

7.9.3 Engineer shall comply with all provisions of local, state and federal laws governing the regulation of equal employment opportunity including Title VI of the Civil Rights Act of 1964.

7.10 Successor and Assigns

City and Engineer each binds themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither City nor Engineer shall assign, sublet or transfer his interest in the Agreement without the written consent of the other.

7.11 Rights and Benefits

Engineer's services will be performed solely for the benefit of the City and not for the benefit of any other persons or entities.

7.12 Compliance with Local Laws

Engineer shall comply with all applicable laws, ordinances and codes of the state and city.

7.13 Law; Submission to Jurisdiction Governing

This Agreement shall be governed by, interpreted and enforced in accordance with the laws of the State of Missouri and/or the laws of the United States, as applicable. The venue for all litigation arising out of, or relating to this Agreement, shall be Boone County, Missouri or the United States Western District of Missouri. The parties hereto irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of Missouri and waive any defense of forum non conveniens.

7.14 Employment of Unauthorized Aliens Prohibited

7.14.1 Engineer agrees to comply with Missouri State Statute section 285.530 in that they shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

7.14.2 As a condition for the award of this Agreement, Engineer shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Engineer shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

7.14.3 Engineer shall require each subcontractor to affirmatively state in its contract with Engineer that the subcontractor shall not knowingly employ, hire for employment or continue to employ an unauthorized alien to perform work within the state of Missouri. Engineer shall also require each subcontractor to provide Engineer with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States.

7.15 Missouri Anti-Discrimination Against Israel Act: To the extent required by Missouri Revised Statute Section 34.600, Engineer certifies it is not currently engaged in and shall not, for the duration of this Agreement, engage in a boycott of goods or services from the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel. If any provision of this paragraph, or the application of such provision to any person or circumstance, shall be held invalid, the remainder of this Agreement, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby. This paragraph shall not apply to contracts with a total potential value of less than one hundred thousand dollars (\$100,000.00) or to contractors with fewer than ten (10) employees.

7.16 No Waiver of Immunities

In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitutions or laws.

7.17 Counterparts and Electronic Signatures

This Agreement may be signed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document. Faxed signatures, or scanned and electronically transmitted signatures, on this Agreement or any notice delivered pursuant to this Agreement, shall be deemed to have the same legal effect as original signatures on this Agreement.

7.18 Agreement Documents

This Agreement includes the following exhibits, which are incorporated herein by reference:

Exhibit	Description				
A	Scope of Work				
В	Hourly Fee Schedule				

C Work Authorization Affidavit

In the event of a conflict between the terms and conditions of this Agreement and any exhibit hereto, the terms contained in this Agreement shall prevail and the terms contained in any exhibit shall subsequently prevail in the order attached hereto.

7.19 Entire Agreement

This Agreement represents the entire and integrated Agreement between Engineer and City relative to the Scope of Basic Services herein. All previous or contemporaneous agreements, representations, promises and conditions relating to Engineer's services described herein are superseded.

[SIGNATURES ON FOLLOWING PAGE]

CITY OF COLUMBIA, MISSOURI

By:

City Manager

Date: _____

ATTESTED BY:

Sheela Amin, City Clerk

APPROVED AS TO FORM:

Nancy Thompson, City Counselor

CERTIFICATION: I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. **55506315-504990**, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

By:

Director of Finance

TREKK DESIGN GROUP, KIM ROBINETT By:

3/10/25 _____ Date:

ATTEST:

By: ______ Name: <u>Ryan Fleming</u>_____ By:

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Scope of Service Provided to City of Columbia

Lee White, P.E. Hydraulic Model and Flow Monitoring Scope February 21, 2025

Summary

TREKK Design Group, LLC (TREKK) is uniquely equipped with the staff and resources to assist the City of Columbia, Missouri (City) in advancing the next steps of their Integrated Management Plan (IMP) and addressing the planning and maintenance needs of both the sanitary and stormwater conveyance systems.

The intent of this scope of work is to support the transition the existing hydraulic model to a City staff tool that will be updated and used to support capital improvement and operation and maintenance decisions. The hydraulic model has been created over a number of years by different third parties. Incorporating this tool into the workflow process will create a sustainable integration of the model and provide the City with the ability to update the model internally. New structures and conveyance piping systems will always be added and rehabilitated in the system, so the hydraulic model has to be modified and integrated as part of the workflow to function as close as possible to what actually happens in the sewers. As new flow monitoring data and sewer construction is completed TREKK hopes that City staff will be able to update the model.

We are presenting the scope and estimated fee below to complete the hydraulic model integration and flow monitoring. Flow monitoring in the spring will provide the necessary data for the hydraulic model calibration. The data collection and calibration will occur in areas directed by the City. TREKK will assist the City in updating the hydraulic model with this information during a scheduled workshop as part of the hydraulic model integration. Our focus is to help the City integrate tools that support decision-making processes, enhance regulatory and stakeholder reporting, and develop a sustainable application through workflow processes.

Hydraulic Model Review and Workshops

TREKK will assist the City integrate the existing hydraulic model into the work flow processes and provide training for City identified staff. TREKK will review the existing hydraulic model and the documentation provided by previous consultants. TREKK will lead three half day workshops during 2025 to provide direction and training to help the City internalize the model tool use.

TREKK will help City staff update the hydraulic model with new flow meter data. Working through this required update will help the City be prepared to update the model in future years internally.

TREKK will review the hydraulic model and modeling configuration and add documentation where necessary to provide the City with a concise list of assumptions that will be updated as revised or new information is available. For purposes of creating a schedule TREKK has assumed that we can begin preparing the workshop material in February 2025.

The first workshop will be held in March 2025 and will be focused on the software accessibility, the source of tools and resources, ie GIS files, used in the existing model, and the model assumption documentation.

The second workshop will be focused on importing new flow meter data and recalibrating the model. This workshop is projected to be held in July 2025.

The third workshop meeting will be held in September 2025 and will be focused on exercises to use the model to assess the available capacity of a new development project or connecting new sources to an existing node.

The final workshop will be held in October and will provide focused time on how to use the hydraulic model to run scenarios to help City identify capacity related issues to support development or identify improvement project areas.

Flow Metering

TREKK proposed ten (10) flow meter locations in Columbia, Missouri to provide flow monitoring data from selected sanitary sewers to advance the calibration of the hydraulic model in targeted areas directed by the City. TREKK will review the flow monitoring sites selected by the City. The (10) flow meters and five (5) rain gauges will be installed in March 2025 for a monitoring period to begin April 1 and extend for a duration of 90 days. A final deliverable with raw data in an excel format will be provided after removal of the equipment. Poor cell coverage will be require manual data downloads on a bi-monthly cycle.

TREKK field staff will communicate site issues related to safety, equipment installation, or flow quality to the City. Surface access, traffic, depth and velocity of flow will all be considered prior to the equipment installation. TREKK will communicate any conflicts with the City to determine acceptable alternative locations.

A proposed site selection spreadsheet, including flow meter and rain gage locations will be provided to the City two weeks prior to field site investigations. Rain gage locations will be in protected areas without overhead interference or adjacent wall obstructions.

Sewers up to 24-inches in diameter may be fitted with scissor bands. Larger diameter pipes will be secured with metal bands anchored into the pipe at least one foot above the flow, using a minimum of four anchor bolts and concrete anchors. Before mobilizing to begin field work, a pre-site meeting with the Client, including safety discussions, will be conducted. TREKK will assess the flow conditions in the large diameter structures during investigation site visits.

TREKK will secure equipment, including probes and meters, in structures in a manner that will minimize flow restrictions and minimize damage to equipment during wet weather events. TREKK is not responsible for damage to City sewers if damage is caused to data collection equipment by acts of the City or severe weather events. TREKK is responsible for installing equipment in a reasonable manner to protect equipment during wet weather events.

TREKK will document site conditions and data observations during each site installation with installed measurements and pipe photographs. Measurements will include confirmed pipe size, measured flow depth, velocity collected by portable velocity meter, depth of debris, and measured distance from invert to rim of structure.

TREKK will complete bi-monthly site interrogations of each site to include maintenance of equipment, confirmation of velocity and depth measurements, and documentation of flow conditions. Meter sites where consistent cell coverage is available may be reviewed each week and prior to a forecasted rain event. Meter functionality at these locations will be discussed with City and an interim site visit will be performed if requested.

Flow and rain gauge data rely on the functionality of sensitive instruments installed in harsh conditions. Equipment installed in sanitary sewer flow is susceptible to data drops due to solids on probes, damage from larger debris in elevated flow conditions, moisture and chemical-related corrosion of electrical contacts, data signal strength issues, and battery life limitations. While site visits can reduce data gaps, they cannot eliminate them entirely. If a meter location consistently experiences data drops due to sanitary flow conditions, an alternate location may need to be identified.

TREKK will remove equipment from each site within a reasonable amount of time following notification by Client that sufficient data has been collected.

Meter data in five (5) minute intervals will be provided in a excel data format including time, depth, and calculated flow rate to be incorporated into the hydraulic model.

Fee Estimate

An estimated fee of \$142,720.00 to complete the scope of work will be billed as indicated in the table below. Invoices will be submitted monthly based on current hourly fee structure rates. If additional site visits or meter relocations are necessary, TREKK will coordinate with the City before proceeding and obtain approval for any required changes in project expenses.

TASK	DESCRIPTION	ESTIMATE
Project Administration	Provide schedule updates, event observations and invoicing	\$7,054.00
Hydraulic Model Review	Detail review of model and workshop training outlines	\$11,900.00
Hydraulic Model Workshops	Four half day workshops to be completed at City office	\$25,616.00
Meter Setup & Calibration	Location review with City and field verification of hydraulics. Set up band, probe and meter with calibration	\$9,378.00
Flow Meter Installation	Install meters and rain gages. Complete a download confirmation after 24 hours.	\$10,174.00
Data Collection	Complete site interrogation (two per month). Includes equipment cost.	\$54,838.00
Flow Meter Equipment Removal	Complete final meter interrogation and remove all equipment.	\$9,436.00
Data Review and Delivery	Review data after each interrogation and provide a spreadsheet for inclusion in hydraulic model. Provide a memo describing the project.	\$14,324.00
	Total	\$142,720.00

<u>Schedule</u>

TREKK can begin this work in March 2025 and complete these scope items by December 2025. Selecting the most appropriate time to complete a 90-day monitoring period is not an exact science. An ideal monitoring period includes an extended period of dry weather and multiple wet weather events for a successful model calibration. TREKK may suggest a shift in the monitoring period based on a long range weather forecast prior to installing the equipment and to extend the monitoring if adequate wet weather events are not recorded.



2025 Compensation for Professional Engineering Services¹

The OWNERS's payment to the ENGINEER shall be due and payable as follows:

- 1. For Professional Engineering Services, when authorized and agreed upon in writing, an amount based upon hourly billing rates plus expenses, in accordance with Section III below allowable salary range for each position classification and expenses, or a negotiated amount as agreed upon.
- II. For Other Services, when authorized and agreed upon in writing, an amount based upon hourly rates plus expenses or unit rates, in accordance with Section III below, or a negotiated amount as agreed upon.

III. Hourly Billing Rates and Expenses:

ng Rates and Expense				Flath Guard	6400.50	- 1	\$189.4
Project Principal	\$236.74	-	\$404.04	Field Crew	\$132.58	-	\$138.8
Project Manager	\$151.52	-	\$328,29	Senior Field Technician	\$101.01	-	
Senior Professional Engineer	\$192.55	-	\$328,29	Field Technician I	\$85.23		\$116.7
Professional Engineer	\$173.61	-	\$271,47	Field Technician II	\$72.60	-	\$101.0
Professional Engineer II	\$151,52	-	\$227.27	Field Technician III	\$63.13	-	\$85.2
Professional Engineer III	\$123.11	-	\$179.93	Field Technician IV	\$56.82		\$72.
Senior Project Engineer	\$157,83	-	\$252.53	Senior Professional Land Surveyor	\$195.71	-	\$315.
Project Engineer I	\$129.42	-	\$189.40	Professional Land Surveyor I	\$154.67	-	\$239.
Project Engineer It	\$107.32	-	\$151.52	Professional Land Surveyor II	\$123.11	-	\$186.
Project Engineer III	\$91.54		\$126.26	Professional Land Surveyor III	\$101.01	-	\$148.
Senior Industry Specialist	\$202.02	-	\$325,13	Survey Crew	\$202.02		
Industry Specialist I	\$164.14	-	\$265.15	3-Man Survey Crew	\$271.47		
Industry Specialist II	\$126.26	-	\$202.02	LiDAR Crew	\$236.74		
Industry Specialist III	\$97.85	-	\$157.83	Senior Survey Technician	\$107,32	-	\$173
Senior Office Technician	\$101.01	I	\$164.14	Survey Technician I	\$88.38	-	\$129.
Office Technician I	\$85.23	-	\$116,79	Survey Technician II	\$72,60	-	\$104
Office Technician II	\$72.60	-	\$101.01	Survey Technician III	\$63.13	-	\$85
Office Technician III	\$63,13	-	\$85.23	Senior Survey Crew Chief	\$116,79	-	\$189
Senior GIS Analyst	\$132.58		\$214.65	Survey Crew Chief I	\$94.70	-	\$138
GIS Analyst I	\$107.32		\$157.83	Survey Crew Chief II	\$78.91	-	\$110
GIS Analyst II	\$88.38	-	\$126.26	Survey Crew Chlef III	\$66.29		\$91
GIS Analyst III	\$75.76	-	\$104.17	Survey Instrument Technician	\$59.98	I	\$104
Senjor GIS Technician	\$107.32	-	\$173.61	Senior Utility Coordinator	\$107.32	-	\$173
GIS Technician I	\$88.38	_	\$129.42	Utility Coordinator I	\$85.23	1	\$129
GIS Technician II	\$72.60	-	\$104.17	Utility Coordinator II	\$85.23	I.	\$119
GIS Technician III	\$63,13	_	\$85.23	Utility Coordinator III	\$72.60	-	\$101
Senior Project Designer	\$142.05	-	\$227.27	Utility Locator	\$63.13	-	\$107
Project Designer I	\$116.79	-	\$170.46	Senior Construction Inspector	\$123,11	-	\$198
Project Designer II	\$97,85	-	\$138.89	Construction Inspector I	\$101.01	-	\$148
Project Designer III	\$82.07		\$116.79	Construction Inspector II	\$85.23	-	\$119
Senior CADD Technician	\$107.32	-	\$173.61	Construction Inspector III	\$72,60	-	\$101
CADD Technician I	\$88.38		\$129.42	Construction Observer	\$63.13		\$85
CADD Technician II	\$72.60	-	\$104.17	Senior Technology Specialist	\$198.87		\$318
CADD Technician III	\$59,98	-	\$85.23	Senior Innovation Specialist	\$142,05		\$227
Senior Marketing Specialist	\$123.11		\$198.87	Senior PMO Specialist	\$142.05	_	\$227
Marketing Specialist I	\$97.85	_	\$148.36	PMO Specialist I	\$116.79		\$170
Marketing Specialist I	\$78.91		\$119.95	PMO Specialist 1	\$97.85	-	\$138
Marketing Specialist II	\$63.13	<u> </u>	\$94.70	PMO Specialist III	\$82.07	-	\$113
Admin	\$63.13		\$107.32	Senior Operations Administrator	\$107.32		\$173
	\$56.82		\$107.52	Operations Administrator I	\$88.38		\$129
	\$20.62		3119.93	Operations Administrator I	\$72.60		\$104
· · · · · · · · ·	·			Operations Administrator III	\$63.13		\$85



Civil Engineering Firm

Equipment Billing Rates:						
Easement/Portable	\$35.00	hr	 LiDAR Equipment	\$3,200.00	hr	
CCTV Crew	\$325.00	hr	 Survey Drone	\$600.00	dy	
Jetter Crew	\$275.00	hr	 Static Scan Equipment	\$700.00	dy	
Mileage	\$0.700	mi	Slam Equipment	\$300.00	dy	
Traffic Camera	\$5.00	hr	 Survey Equipment	\$14.00	hr	
Other Expenses	Cost					

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¹: The above hourly rates and unit prices are good through December 31, 2025.

²: Current Audited or IRS Standard Mileage Rate

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CITY OF COLUMBIA, MISSOURI WORK AUTHORIZATION AFFIDAVIT PURSUANT TO 285.530 RSMo (FOR ALL CONTRACTS IN EXCESS OF \$5,000.00)

County of c) SS. State of

My name is <u>Kinbuch</u> <u>Rebuilt</u>. I am an authorized agent of <u>TREKK</u> <u>Design</u> <u>Group</u>, <u>LCC</u>(Bidder). This business is enrolled and participates in a federal work authorization program for all employees working in connection with services provided to the City of Columbia. This business does not knowingly employ any person who is an unauthorized alien in connection with the services being provided.

Documentation of participation in a federal work authorization program is attached to this affidavit.

Furthermore, all subcontractors working on this contract shall affirmatively state in writing in their contracts that they are not in violation of Section 285.530.1 RSMo and shall not thereafter be in violation. Alternatively, a subcontractor may submit a sworn affidavit under penalty of perjury that all employees are lawfully present in the United States.

Affiant

Printed

Subscribed and sworn to before me this ∠

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Donna K Wooten	
Notary Rupico Notary Seat	h
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My Comnission Expires 8/14/2026	R
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