# 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:

Project consists of an evaluation of approximately 800 structures for remaining useful life and consequence of failure as identified by the City. The Engineer will be required to complete a field inspection of said pipes and structures and prepare the collected information to submit to the City in addition to the detailed scope of services mentioned herein.

(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 qualified 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 **April 30, 2024.** (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 Title	Assignment
Ryan Fleming, P.E., Senior Engineer	Project Manager
Kristen Wenzel, GIS Analyst	GIS Technical Lead
Todd Siefert, Field Manager	Local Field Crew Lead

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 **150** 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 \$136,674.00**.

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.

<u>Professional Liability</u> 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.

**Workers' Compensation Insurance & Employers' Liability** 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.

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	<b>Description</b>
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. **55806620 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, LLC

51212024

By:

Date:

ATTEST:

Bv: Name:



# Scope of Service Provided to City of Columbia

Lee White, P.E. Field Services GIS "Unknown" Storm Pipe Asset Inventory Data Collection April 30, 2024

#### **Special Site Conditions**

TREKK Design Group, LLC (TREKK) was requested to provide a scope of service to complete a field study for the City of Columbia Missouri (City) to assist mapping stormwater assets that are currently identified as "unknown" in the City database. This work will be similar in scope to the GIS mapping completed in 2023 as a pilot to completing the asset inventory.

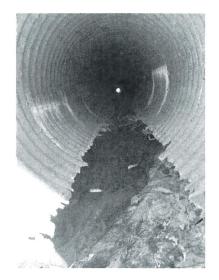
The City provided a shape file with assets identified as "unknown" in the stormwater asset layer. Many of the assets are located but are "unknown" because there is missing asset information – such as pipe material, diameter, or pipe shape. TREKK field staff will collect this attributional information on each structure, as well as confirm and correct any location or connectivity updates.

Some pipes are accessible from the surface, culverts under roads, and through manhole structures that are part of the extended pipe conveyance system. Example of accessible from the surface and through a structure are shown below:



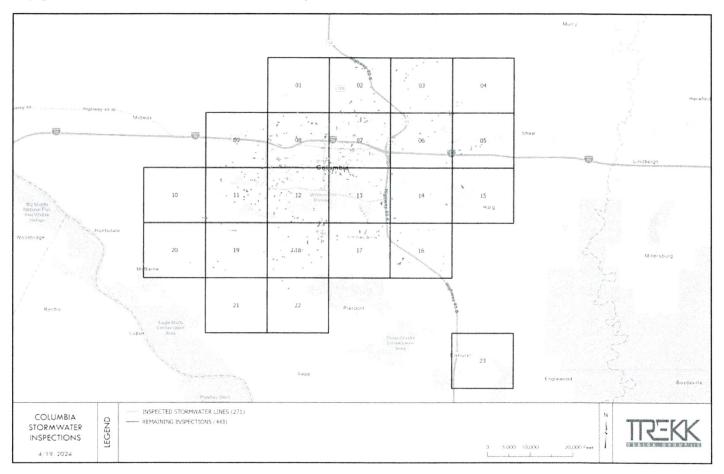
The primary purpose of collecting this information is to complete the attribution of the assets in the City GIS database. The additional condition observations of these assets can be used to prioritize repairs and estimate the Remaining Useful Life (RUL) of the stormwater infrastructure, similar to work completed by TREKK on the large diameter corrugated metal pipe structures. Updated field location data, such as proximity to road and critical infrastructure, will support the prioritization of pipes based on the Consequence of Failure (COF) for flooding or road failure. No internal pipe inspections will be completed. Pipe

pictures, see example below, will be collected to provide the City pipe conditions near access points. Pipe condition for the entire pipe length will not be visible.



TREKK reviewed the GIS data of each location and created a map book. TREKK developed a data collection application specific to the City's field requests to be filled out by crews at each location. The attribute information will be provided in a format that the City can add to the GIS stormwater assetlayer. Information will include pipe size, material, GPS coordinate location (not survey grade), condition rate scoring (1 through 5), photographs of entrance/exit conditions and field notes. An example report is included as Attachment 1.

There are 800 plus pipe segments in the "unknown" data set. The figure below shows the map grids for coordinating field efforts. TREKK has already completed a subset of the assets in this data set as indicated by the green dots below. TREKK estimates that there are approximately 800 remaining access points, 400 pipe segments, to be inspected. We recognize the figure below is very busy and at a scale that is not easily viewed – the purpose of the figure is to show the location of the 23 map grids and the distribution of the assets in the City owned area.



The following assumptions are incorporated:

- 1. TREKK will complete field work with a 2-person crew for safety considerations. Standard working hours will be between the hours of 7 am and 7 pm Monday through Friday and 7 am to noon on Saturday.
- 2. TREKK will complete this work on accessible structures during dry weather periods. Dry weather will provide the safest access to the pipes and leave the most exposed pipe visible for condition scoring.
- 3. TREKK will follow our health and safety plan for traffic control and confined space entry as needed. The City provided a link to the CATSO Map for planning work in high traffic areas.
- 4. No internal pipe inspections will be completed with CCTV or push cameras. All pipe photographs will be collected from the pipe openings or connection to manhole structures.
- 5. If manhole structures are greater than 25 feet deep TREKK 360 video and pictures can be collected but pipe dimensions will be approximate.
- 6. All of the structures included in the dataset from the City are assumed to be public owned structures.

#### Scope of Service

TREKK proposes the following task to complete this work.

- 1. Use the existing City data collection application in Fulcrum prepared by TREKK for previous projects. The template will include a scoring scale (1 through 5) that will be used to prioritize pipes. Scoring will include visual assessment of pipe entrance and exit conditions.
- TREKK crews will use various equipment to attempt to locate any buried pipe ends. If TREKK crews are unable to locate the pipe end after 15 minutes, the point will be designated as cannot locate (CNL) and recommended for subsequent CCTV.
- 3. If field crews inspect an asset that poses an immediate threat of failure or public safety issue crews will send an email to Justin Fessler <u>justin.fessler@como.gov</u> with a picture of the defect. Weekly updates will be sent via email to Lee White <u>lee.white@como.gov</u> with a brief summary of work completed, schedule conflicts, non-emergency pipe issues, and planned activities.
- 4. Complete a field inspection of each pipe. A two (2) person crew will inspect each pipe and score the pipe based on the criteria approved in one (1) above. TREKK will collect picture and field notes of each pipe condition. Pole mounted cameras will be used to observe pipe conditions near manhole structures when accessible. No confined space entries will be made during this phase.
- TREKK will communicate with the City the proposed work areas each day through a email to Justin Fessler <u>justin.fessler@como.gov</u> and Jerry East <u>jerry.east@como.gov</u> providing street boundaries where crews will be working.
- 6. Prepare a GIS deliverable for the City to incorporate into their database with relational tables for future access to pictures and notes for creating work scopes to repair or replace pipes. TREKK will coordinate geodatabase deliverables with City GIS staff. Our intent is that pictures, site notes, and scores can be included in attribute tables tagged to each pipe inspected. Reports can be provided in a PDF format for inspections, see example in Attachment 1.
- 7. Evaluate the field data collected. TREKK will provide a summary score of 1 through 5 for each pipe or structure based on visual inspection of the asset.

#### Fee Estimate

We estimate that there are 800 structures in the remaining data set to inspect. Some structures are not easily accessible because of traffic or steep slopes with dense vegetation. We have assumed a field production rate of 12 structures per day. The field work will be completed in a 13 week period.

An estimated cost of \$136,674.00 to complete the scope of work will be billed as indicated in the table below. Invoices will be submitted on a percentage of work completed at the unit rates in the table below not to exceed \$136,674.00. The number of units are estimated based on access and inspection time. The level of effort to complete approximately 800 structures is included in this project estimate. This is based on an average of 40 minutes per structure.

TASK	COMMENT	UNITS	RATE	ESTIMATE
Project Management & Meetings		30	\$205.00	\$6,150.00
Field Inspections	2-person crew	520	\$190.00	\$98,800.00
GIS Deliverable		60	\$110.00	\$6,600.00
Pipe Evaluation	Score 1 to 5	20	\$205.00	\$4,100.00
Expenses	Travel and equipment	48	\$438.00	\$21,024.00
			TOTAL	\$136,674.00

#### Schedule

Field work will be completed in 13 weeks under dry weather conditions where pipes are accessible. We will coordinate the schedule with the City based on availability of field crews. A team meeting with the City will be requested following the first week of data collection to confirm that TREKK is aligned with City expectations.

#### **ATTACHMENT 1**

Example Field Data Collection Sheet

# Columbia, MO - CMP Inspections



Pipe ID

MB431-MB631

# **General Information**

Surveyed By - Tablet	TDG\R.Perry				
Date	May 25, 2023				
Time	10:14				
Weather	Dry				
Last Rainfall	May 15, 2023				

# Location

#### Address

Location Code

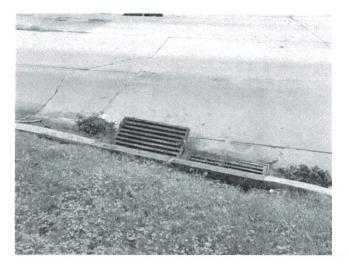
4428 W Smith Dr Columbia Missouri 65203 USA ROW (Street, Grass, Backyard, etc)

#### EXHIBIT A -- SCOPE OF SERVICES

Area Photo (6 o'clock)



Topside Photo – MB431



# **Pipe Inspection**

# MB431-MB631

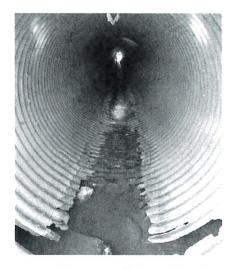
Pipe Height (Diameter) Material	
Road to Pipe Invert	
Upstream	
Downstream	
Condition Rating	
Pipe Comment	

# Inlet (Upstream)

60 inches CMP 6 inches MB431 – Area Inlet MB631 – Outfall 1 – Repairs Required Invert rusted out



# **Pipe Photos**



# Outfall (Downstream)



# **Structure Inspec**

**MB431** 

Structure Type	Curb Inlet
Material	Brick
Structure Dimensions	48 x 60
Connections	2
Condition Rating Structure Comment	1 – Repairs Required Leaking walls

#### EXHIBIT A -- SCOPE OF SERVICES



# **Topside Photo**



# **Structure Inspec**

# **MB631**

Structure Type	Outfall
Material	Concrete
Structure Dimensions	60
Connections	1
Condition Rating	5 - Good
Structure Comment	Debris in Invert

TREKK Design Group, LLC



# **Road/Surface Photo**



Road Surface Type	(B) Concrete/Pavement
Pipe Height (Diameter)	29
Road to Pipe Invert	4
Pipe Condition	(S) Sound
Additional Pipe Photos	

Additional Pipe Comment



#### 2024 Compensation for Professional Engineering Services<sup>1</sup>

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

- I. 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:

g Kates and Expenses							
Project Principal	\$233.74	-	\$398.92	Field Crew	\$130.90	-	\$187.0
Project Manager	\$149.60	-	\$324.13	Senior Field Technician	\$99.73	-	\$162.0
Senior Professional Engineer	\$190.11	-	\$324.13	Field Technician I	\$81.03	-	\$118.4
Professional Engineer I	\$171.41	-	\$268.03	Field Technician II	\$68.56	-	\$96.6
Professional Engineer II	\$149.60	-	\$224.39	Field Technician III	\$59.22	-	\$81.0
Professional Engineer III	\$121.55	-	\$177.65	Field Technician IV	\$52.98	-	\$68.5
Senior Project Engineer	\$155.83	-	\$249.33	Senior Professional Land Surveyor	\$193.23	-	\$311.0
Project Engineer I	\$127.78	-	\$187.00	Professional Land Surveyor I	\$152.71	-	\$236.8
Project Engineer II	\$105.96	-	\$149.60	Professional Land Surveyor II	\$121.55	-	\$183.
Project Engineer III	\$90.38	-	\$124.66	Professional Land Surveyor III	\$99.73	-	\$146.4
Senior Industry Specialist	\$199.46	-	\$321.01	Survey Crew	\$199.46		
Industry Specialist I	\$171.41	-	\$274.26	3-Man Survey Crew	\$268.03		
Industry Specialist II	\$130.90	-	\$211.93	LiDAR Crew	\$233.74		
Industry Specialist III	\$99.73	-	\$162.06	Senior Survey Technician	\$105.96	-	\$171.
Senior Office Technician	\$105.96	ж	\$171.41	Survey Technician I	\$87.26	-	\$127.
Office Technician I	\$87.26	-	\$127.78	Survey Technician II	\$71.68	-	\$102.
Office Technician II	\$71.68	-	\$102.85	Survey Technician III	\$62.33	-	\$84.
Office Technician III	\$62.33	-	\$84.15	Senior Survey Crew Chief	\$115.31		\$187.
Senior GIS Analyst	\$130.90	-	\$211.93	Survey Crew Chief I	\$93.50	-	\$137.
GIS Analyst I	\$105.96	-	\$155.83	Survey Crew Chief II	\$77.91	-	\$109.
GIS Analyst II	\$87.26	-	\$124.66	Survey Crew Chief III	\$65.45	-	\$90.
GIS Analyst III	\$74.80	-	\$102.85	Survey Instrument Technician	\$59.22	-	\$102.
Senior GIS Technician	\$105.96	-	\$171.41	Senior Utility Coordinator	\$105.96	-	\$171.
GIS Technician I	\$87.26	-	\$127.78	Utility Coordinator I	\$84.15	-	\$127.
GIS Technician II	\$71.68	-	\$102.85	Utility Coordinator II	\$84.15	-	\$118.
GIS Technician III	\$62.33	-	\$84.15	Utility Coordinator III	\$71.68	-	\$99.
Senior Project Designer	\$140.25	-	\$224.39	Utility Locator	\$62.33	-	\$105.
Project Designer I	\$115.31	-	\$168.30	Senior Construction Inspector	\$121.55	-	\$196.
Project Designer II	\$96.61	-	\$137.13	Construction Inspector I	\$99.73	-	\$146.
Project Designer III	\$81.03	-	\$115.31	Construction Inspector II	\$84.15	-	\$118.
Senior CADD Technician	\$105.96	-	\$171.41	Construction Inspector III	\$71.68	-	\$99.
CADD Technician I	\$87.26	-	\$127.78	Construction Observer	\$62.33		\$84.
CADD Technician II	\$71.68	-	\$102.85	Senior Technology Specialist	\$196.35	-	\$314.
CADD Technician III	\$59.22	-	\$84.15	Senior Innovation Specialist	\$140.25	-	\$224.
Senior Marketing Specialist	\$121.55	-	\$196.35	Senior PMO Specialist	\$140.25	-	\$224.
Marketing Specialist I	\$96.61	-	\$146.48	PMO Specialist I	\$115.31	-	\$168.
Marketing Specialist II	\$77.91	-	\$118.43	PMO Specialist II	\$96.61	-	\$137.
Marketing Specialist III	\$62.33	-	\$93.50	PMO Specialist III	\$81.03	-	\$112.
Admin	\$62.33	-	\$105.96	Senior Operations Administrator	\$105.96	-	\$171.
Intern	\$56.10	-	\$118.43	Operations Administrator I	\$87.26	-	\$127.
	+		,	Operations Administrator II	\$71.68	-	\$102.
				Operations Administrator III	\$62.33	-	\$84.



Equipment Billing Rates:			LiDAR Equipment	\$2,500.00	hr	
CCTV Crew	\$325.00	hr	Survey Drone	\$600.00	dy	
Jetter Crew	\$275.00	hr	Static Scan Equipment	\$500.00	dy	
Mileage	\$0.670	mi	Slam Equipment	\$300.00	dy	
Traffic Camera	\$5.00	hr	Survey Equipment	\$14.00	hr	
Other Expenses	Cost					

<sup>1</sup>: The above hourly rates and unit prices are good through December 31, 2024.
<sup>2</sup>: Current Audited or IRS Standard Mileage Rate

# NOTICE TO VENDORS Section 285.525 – 285.550 RSMo Effective January 1, 2009

Effective January 1, 2009 and pursuant to RSMo 285.530 (1), No business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

As a condition for the award of any contract or grant in excess of five thousand dollars by the state or by any political subdivision of the state to a business entity, or for any business entity receiving a state administered or subsidized tax credit, tax abatement, or loan from the state, the business entity 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. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. [RSMO 285.530 (2)]

An employer may enroll and participate in a federal work authorization program and shall verify the employment eligibility of every employee in the employer's hire whose employment commences after the employer enrolls in a federal work authorization program. The employer shall retain a copy of the dated verification report received

from the federal government. Any business entity that participates in such program shall have an affirmative defense that such business entity has not violated subsection 1 of this section. [RSMO 285.530 (4)]

For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is an example of this type of program. Information regarding E-Verify is available at:

http://www.dhs.gov/xprevprot/programs/gc\_1185221678150.shtm.

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

County of <u>Jackson</u>) ) ss. State of <u>Missouri</u>)

My name is <u>Kimberly Robinett</u>. I am an authorized agent of <u>TREKK Design Group, LLC</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

<u>Kimberly Robinett</u> Printed Name

Subscribed and sworn to before me this $2\kappa$ o	_day of <u>may</u> , 20 <u>2</u>	f
Notan	vides Dodson	

