City of Evans, Colorado
SERVICE AGREEMENT
FOR PROFESSIONAL SERVICES BY
INDEPENDENT CONTRACTOR

THIS AGREEMENT is made and entered into this **17th day of May 2022,** by and between the City of Evans, State of Colorado (hereinafter referred to as the "City"), and **HDR Engineering, Inc.** (hereinafter referred to as "Consultant").

RECITALS:

A. The City requires professional services for the design/preparation of the **WASTEWATER UTILITY MASTER PLAN PROJECT.** hereinafter referred to as "Project").

B. Consultant has held itself out to the City as having the requisite expertise and experience to perform the required services for the Project.

NOW, THEREFORE, it is hereby agreed, for the consideration hereinafter set forth, that Consultant shall provide to the City professional consulting services for the Project.

I. SCOPE OF SERVICES

Consultant shall furnish all labor and materials to perform the services required for the complete and prompt execution and performance of all duties, obligations and responsibilities for the Project, which are described or reasonably implied from **Exhibit A**, which is attached hereto and incorporated herein by this reference.

II. THE CITY'S OBLIGATIONS/CONFIDENTIALITY

The City shall provide Consultant with reports and such other data as may be available to the City and reasonably required by Consultant to perform hereunder. No project information shall be disclosed by Consultant to third parties without prior written consent of the City or pursuant to a lawful court order directing such disclosure. All documents provided by the City to Consultant shall be returned to the City. Consultant is authorized by the City to retain copies of such data and materials at Consultant's expense.

III. OWNERSHIP OF INSTRUMENTS OF SERVICE

The City acknowledges that the Consultant's documents are an instrument of professional service. Nevertheless, the documents prepared under this Agreement shall become the property of the City upon completion of the services. Any reuse of the Consultant's documents is at the City's own risk without liability to the consultant.

IV. COMPENSATION

A. In consideration for the completion of the services specified herein by Consultant, the City shall pay Consultant on a time and materials basis in an amount not to exceed **One Hundred and Sixty-Nine Thousand One Hundred and Five Dollars (169,105.00)** Payment shall be made in accordance with the schedule of charges in **Exhibit B**, which is attached hereto and incorporated herein by this reference. Invoices will be itemized and include hourly breakdown for all personnel and other charges. The maximum fee specified herein shall include all fees and expenses incurred by Consultant in performing all services hereunder.

B. Consultant may submit monthly or periodic statements requesting payment. Such request shall be based upon the amount and value of the services performed by Consultant under this Agreement, except as otherwise supplemented or accompanied by such supporting data as may be required by the City.

1. All invoices, including Consultant's verified payment request, shall be submitted by Consultant to the City no later than the twenty-fourth (24th) day of each month for payment, pursuant to the terms of this Agreement. In the event Consultant fails to submit any invoice on or before the twenty-fourth (24th) day of any given month, Consultant defers its right to payment, pursuant to said late invoice, until the following month.

2. Progress payments may be claimed on a monthly basis for reimbursable costs actually incurred to date as supported by detailed statements, including hourly breakdowns for all personnel and other charges. The amounts of all such monthly payments shall be paid within thirty (30) days after the timely receipt of invoice, as provided by this Agreement. No payment shall be due on the portion of any invoice for which the City has requested clarification unless and until 30 days after clarification satisfactory to the City has been provided by Consultant.

C. The City has the right to ask for clarification on any Consultant invoice after receipt of the invoice by the City.

D. In the event payment for services rendered has not been made within forty-five (45) days from the timely receipt of the invoice for any uncontested billing, interest will accrue at the rate of twelve percent (12%) per annum compounded annually. In the event payment has not been made within ninety (90) days from the receipt of the invoice for any uncontested billing, Consultant may, after giving seven (7) days' written notice and without penalty or liability of any nature, suspend all authorized services specified herein. In the event payment in full is not received within thirty (30) days of giving the seven (7) days' written notice, Consultant may terminate this Agreement. Upon receipt of payment in full for services rendered, Consultant will continue with all authorized services.

E. Final payment shall be made within sixty (60) calendar days after all data and reports (which are suitable for reproduction and distribution by the City) required by this Agreement have been turned over to and approved by the City and upon receipt by the City of Consultant's written notification that services required herein by Consultant have been fully completed in accordance with this Agreement and all data and reports for the Project.

V. COMMENCEMENT AND COMPLETION OF SERVICES

Within seven (7) days of receipt from the City of a Notice to Proceed, Consultant shall commence services on all its obligations as set forth in the Scope of Services or that portion of such obligations as is specified in said Notice. Except as may be changed in writing by the City, the Project shall be complete and Consultant shall furnish the City the specified deliverables, as provided in **Exhibit A**.

VI. CHANGES IN SCOPE OF SERVICES

A change in the Scope of Services shall constitute any material change or amendment of services which is different from or additional to the Scope of Services specified in Section I of this Agreement. No such change, including any additional compensation, shall be effective or paid, unless authorized by written amendment executed by the City. If Consultant proceeds without such written authorization, then Consultant shall be deemed to have waived any claim for additional compensation, including a claim based on the theory of unjust enrichment, quantum merit or implied contract. Except as expressly provided herein, no agent, employee or representative of the City shall have the authority to enter into any changes or modifications, either directly or implied by a course of action, relating to the terms and scope of this Agreement.

VII. PROFESSIONAL RESPONSIBILITY

A. Consultant hereby warrants that it is qualified to assume the responsibilities and render the services described herein and has all requisite corporate authority and professional licenses in good standing, as required by law.

B. The services performed by Consultant shall be in accordance with generally accepted professional practices and the level of competency presently maintained by other practicing professional firms in the same or similar type of services in the applicable community.

C. Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports, and other services furnished by Consultant under this Agreement. Consultant shall, without additional compensation, correct or resolve any errors or deficiencies in his designs, drawings, specifications, reports, and other services, which fall below the standard of professional practice, and reimburse the City for all costs caused by errors and omissions which fall below the standard of professional practice.

D. Approval by the City of drawings, designs, specifications, reports and incidental services or materials furnished hereunder shall not in any way relieve Consultant of responsibility for technical adequacy of the services. Neither the City's review, approval or acceptance of, nor payment for, any of the services shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and Consultant shall be and remain liable in accordance with applicable performance of any of the services furnished under this Agreement.

E. The rights and remedies of the City provided for under this Agreement are in addition to any other rights and remedies provided by law.

VIII. COMPLIANCE WITH LAW

The services to be performed by Consultant hereunder shall be done in compliance with applicable laws, ordinances, rules and regulations.

IX. INDEMNIFICATION

A. "CONSULTANT shall indemnify and save harmless CITY, from and against all claims, liability, demands, losses, and/or expenses resulting from any negligent act or omission of CONSULTANT, its agents, subcontractors and suppliers in the performance of services under this Contract. Such duty to indemnify and save harmless CITY shall be for an amount represented by the degree or percentage of negligence or fault attributable to CONSULTANT. If CONSULTANT is providing architectural, engineering, design, or surveying services, the obligation to indemnify and pay costs, expenses, and attorneys' fees, is limited to the amount represented by the degree or percentage of negligence or fault attributable to the CONSULTANT, or CONSULTANT'S agents, subcontractors, or suppliers as determined by adjudication, alternative dispute resolution, or otherwise resolved by mutual agreement between CONSULTANT and CITY. CONSULTANT'S indemnification obligation shall not be construed to extend to any injury, loss, or damage caused by CITY'S own negligence."

B. INDEMNIFICATION – COSTS: Consultant agrees, to the extent provided in Paragraph A., above, to investigate, handle, respond to, and to provide defense for and defend against any such liability, claims or demands at the expense of Consultant or, at the option of the City, agrees to pay the City or reimburse the City for the defense costs incurred by the City in connection with any such liability, claims or demands. Consultant also agrees, to the extent provided in Paragraph A. above, to bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not any such liability, claims or demands alleged are groundless, false or fraudulent. If Consultant is providing for the defense, Consultant's defense obligation shall cease upon a finding by court of law, arbitrator or by mutual agreement between Consultant and City that Consultant was not at fault. If Consultant agrees to reimburse the City for the defense costs, Consultant's reimbursement is limited to the amount represented by the degree or percentage of negligence or fault attributable to the Consultant as determined by adjudication, alternative dispute resolution, or otherwise resolved by mutual agreement between Consultant and City.

X. INSURANCE

A. Consultant agrees to procure and maintain, at its own cost, a policy or policies of insurance sufficient to insure against all liability, claims, demands and other obligations assumed by Consultant, pursuant to Section IX, Indemnification, above. Such insurance shall be in addition to any other insurance requirements imposed by this Agreement or by law. Consultant shall not be relieved of any liability, claims, demands or other obligations assumed pursuant to Section IX, Indemnification, above, by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations or types.

B. Consultant shall procure and maintain and shall cause any subconsultant of Consultant to procure and maintain, the minimum insurance coverages listed below. Such coverages shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained to cover all liability, claims, demands and other obligations assumed by Consultant, pursuant to Section IX, Indemnification, above. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

1. Worker's compensation insurance to cover obligations imposed by applicable laws for any employee engaged in the performance of services under this Agreement, and Employer's Liability insurance with minimum limits of Five Hundred Thousand Dollars ($500,000) each claim, Five Hundred Thousand Dollars ($500,000) disease - policy limit, and Five Hundred Thousand Dollars ($500,000) disease - each employee.

2. Commercial general liability insurance with minimum combined single limits of One Million Dollars ($1,000,000) each occurrence and Two Million Dollars ($2,000,000) general aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products and completed operations. The policy shall contain a severability of interests provision.

3. Professional liability insurance with minimum limits of One Million Dollars ($1,000,000) each claim and Two Million Dollars ($2,000,000) annual aggregate, and Consultant shall maintain such coverage for at least three (3) years from the termination of this Agreement.

4. The policy required by Paragraph 2, above shall be endorsed to include the City and the City's officers, employees and consultants as additional insureds. Every policy required above shall be primary insurance, with the exception of Professional Liability and Worker's Compensation, and any insurance carried by the City, its officers, its employees or its consultants shall be excess and not contributory insurance to that provided by Consultant. No additional insured endorsement to the policy required by Paragraph 2, above shall contain any exclusion for bodily injury or property damage arising from completed operations. Consultant shall be solely responsible for any deductible losses under any policy required above.

5. The certificate of insurance provided for the City shall be completed by Consultant's insurance agent as evidence that policies providing the required coverages, conditions and minimum limits are in full force and effect and shall be reviewed and approved by the City prior to commencement of the Agreement. No other form of certificate shall be used. The certificate shall identify this Agreement and shall provide that the coverages afforded under the policies shall not be cancelled or terminated until at least thirty (30) days' prior written notice has been given to the City. The completed certificate of insurance shall be sent to:

City of Evans
1100 37th Street
Evans, Colorado 80620-2036
Attn: Safety and Risk Management

6. Failure on the part of Consultant to procure or maintain policies providing the required coverages, conditions and minimum limits shall constitute a material breach of agreement upon which the City may immediately terminate this Agreement or, at its discretion, the City may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Consultant to the City upon demand, or the City may offset the cost of the premiums against any monies due to Consultant from the City.

7. The City reserves the right to request and receive a copy of any policy and any endorsement thereto with sensitive information redacted by Consultant; however, such sensitive information does not include policy limits, effective dates or other standard information included in the insurance declaration or coverage summary for the purpose of allowing the City to ascertain Consultant's insurance coverage." .

8. The parties hereto understand and agree that the City, its officers and its employees are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations (presently Three Hundred Fifty Thousand Dollars ($350,000) per person and Nine Hundred Ninety Thousand Dollars ($990,000) per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Colo. Rev. Stat. §24-10-101, et seq., as from time to time amended, or otherwise available to the City, its officers or its employees.

XI. NONASSIGNABILITY

Neither this Agreement nor any of the rights or obligations of the parties hereto shall be assigned by either party without the written consent of the other.

XIII. TERMINATION

This Agreement shall terminate at such time as the services in Section I are completed and the requirements of this Agreement are satisfied, or upon the City's providing Consultant with seven (7) days' advance written notice, whichever occurs first. In the event the Agreement is terminated by the City's issuance of said written notice of intent to terminate, the City shall pay Consultant for all services previously authorized and completed prior to the date of termination. If, however, the Consultant has substantially or materially breached the standards and terms of this Agreement, the City shall have any remedy or right of set-off available at law and equity. If, however, the City has substantially or materially breached the standards and terms of this Agreement, the Contractor shall have any remedy or right of set-off available at law and equity. If the Agreement is terminated for any reason other than cause prior to completion of the Project, any use of documents by the City thereafter shall be at the City's sole risk, unless otherwise consented to by Consultant.

XIV. CONFLICT OF INTEREST

The Consultant shall disclose any personal or private interest related to property or business within the City. Upon disclosure of any such personal or private interest, the City shall determine if the interest constitutes a conflict of interest. If the City determines that a conflict of interest exists, the City may treat such conflict of interest as a default and terminate this Agreement.

XV. VENUE

This Agreement shall be governed by the laws of the State of Colorado, and any legal action concerning the provisions hereof shall be brought in the County of Weld, State of Colorado.

XVI. INDEPENDENT CONTRACTOR

A. Consultant is an independent contractor. Notwithstanding any provision appearing in this Agreement, all personnel assigned by Consultant to perform services under the terms of this Agreement shall be, and remain at all times, employees or agents of Consultant for all purposes. Consultant shall make no representation that it is the employee of the City for any purposes.

B. Disclosure: Consultant is not entitled to workers' compensation benefits, unemployment insurance benefits unless unemployment compensation coverage is provided by the Consultant or some other entity, and Consultant is obligated to pay federal and state income tax on any moneys earned pursuant to this Agreement for Professional Services by Independent Contractor.

XVII. NO WAIVER

Delays by the City in enforcement of this Agreement or the waiver by the City of any one or more defaults or breaches of this Agreement by the Consultant shall not constitute a waiver of any of the other terms or obligations of this Agreement.

XVIII. ENTIRE AGREEMENT

This Agreement and the attached **Exhibits A-B** are the entire Agreement between Consultant and the City, superseding all prior oral or written communications. None of the provisions of this Agreement may be amended, modified or changed, except as specified herein.

XIX. NOTICE

Any notice or communication between Consultant and the City which may be required, or which may be given, under the terms of this Agreement shall be in writing, and shall be deemed to have been sufficiently given when directly presented or sent pre-paid, first-class United States mail, addressed as follows:

The City: City of Evans
Attn: City Manager
1100 37th Street
Evans, Colorado 80620-2036

Consultant: **HDR Engineering, Inc.**
419 Canyon Avenue, Suite 316
Fort Collins, CO 80521-2670

XX. EFFECTIVE DATE AND EXECUTION

This Agreement shall become effective following execution by both Consultant and City. This Agreement may be executed in counterparts, including by facsimile or electronically, each of which shall be considered an original, but all of which together shall constitute one instrument.

XXI. SPECIAL PROVISIONS

The "Special Provisions" attached hereto as **Exhibit C** and incorporated by this reference are made a part of this Agreement. For purposes of the Special Provisions, the Consultant shall be referred to as the "Contractor."

IN WITNESS WHEREOF, the parties hereto each herewith subscribe the same in triplicate, as of the date first written above.

CITY OF EVANS, COLORADO

By:_____
Mark C. Clark, Mayor

ATTEST:

_____
Julie Kamka, City Clerk

APPROVED AS TO FORM:

_____
Scott Krob, City Attorney

APPROVED AS TO CONTENT:

_____
James L. Becklenberg, City Manager

CONSULTANT

By: _____
Title:_____

ATTEST:

By: _____
Title: _____

Exhibit A
Scope of Services

EXHIBIT A

Scope of Work – City of Evans
Wastewater Utility Master Plan

PROJECT BACKGROUND AND OBJECTIVES

Evans is one of the fastest growing communities in Northern Colorado. Prior to a major flood in 2013, the City of Evans operated two wastewater treatment plants (WWTPs), referred to as the Evans WWTP and the Hill-N-Park WWTP. As a result of the flood, the Evans WWTP was essentially destroyed and rendered nonoperational. The City determined at that time to replace both WWTPs with a single consolidated plant to be built at the Hill-N-Park location. The consolidated WWTP was designed for a rated hydraulic capacity of 2.88 million gallons per day (MGD), and solids loading capacity of 6,624 pounds per day (ppd) of BOD.

The City's current Wastewater Utility System Master Plan was adopted in 2015 as part of the Project Needs Assessment that led to the design of the consolidated WWTP that was expected to have sufficient capacity to satisfy the City's needs through 2035. The Consolidated WWTP was constructed and went into operation in early 2018. However, in late 2019, plant operators determined that the new Consolidated WWTP had reached 80 percent of its influent organic loading capacity. The new Wastewater Utility Master Plan to be developed as a result of this procurement process will be the basis for planning treatment capacity expansion, solids handling processes, and collection system improvements both existing and for future growth.

The City has just completed an update to its Community Master Plan, including clarification of community vision and values and a proposed future land use map that will be instrumental in the development of this updated Wastewater Utility Master Plan. The City has also completed some preliminary sanitary sewer collection planning for areas of the City in the Urban Growth Areas (UGA) south of the South Platte River.

The overall goal of the project is to create a Wastewater Utility Master Plan that the City can use for the planned WWTP expansion and for design and construction of future collections systems to service the planned development throughout Evans but primarily for the undeveloped areas west and south of current growth limits.

The key objectives for the updated WWUMP are the following:

1. Create a Wastewater Utility Master Plan that the City can use for the planned WWTP expansion and for design and construction of future collections systems to service the planned development throughout Evans but primarily for the undeveloped areas west and south of current growth limits.
2. Evaluate the service area, determine the 208 boundary, develop current and future flows and loads.
3. Plan for regulatory changes including Regulation 31.
4. Prioritize and develop a capital improvements plan for the recommendations.

TASK SERIES 100 – PROJECT MANAGEMENT

Plan and execute the Wastewater Utility Plan in accordance with an established schedule and budget while meeting quality expectations.

101 Project Initiation Team Meeting

This meeting will provide an opportunity to obtain City input regarding the conduct and execution of this project. The meeting will be used to finalize the project schedule and project management plan, task priorities and to work out unresolved details. The meeting will be used to identify the project team members from the City and will also be used to identify the sources and methods of collecting data under the City's control.

The goals of this initial meeting are to:

- Specify the lines of communication.
- Establish team meeting dates for review of the progress of the project.
- Identify City personnel who are to provide information/services during the work.
- "Brainstorm" ideas for accomplishing project goals.
- Identify information needs from the City.
- Establish a firm schedule for the project.
- Update the Project Management Plan

Based on the results from this meeting, HDR will prepare a memorandum summarizing mutually agreed understanding of project scope, objectives, and schedule, including budgetary information. The project initiation meeting will be held in-person at the City's facilities and is budgeted for a total length of three hours.

102 Project Coordination Meetings

Meetings will be held with the City to review status of the planning effort. These meetings will be held in coordination with other meetings and workshops during the course of the work. A total of eight one-hour meetings will be budgeted in addition to other scheduled meetings and workshops. It is assumed these meetings will be in person at the City's facilities.

103 Project Management and Administration

Set forth project procedures and clearly define individual responsibilities, task schedules, milestones, deliverables, and task budgets. Contains project objectives; organization and roles of the project team, contract work plan, management tools and techniques; subconsultant management; coordination with the City and other participating agencies; Quality Assurance and Quality Control Plan; monitoring; reporting and administrative procedures. At the onset of the project, a project team meeting will be conducted to develop communication channels and form the basis for a comprehensive Project Management Plan.

HDR will manage and control its professional services contract to provide efficient completion of the project. The HDR project manager will submit project invoices monthly. A progress memorandum, in bullet item format, will be prepared with each monthly invoice. The progress memo will summarize the work progress to date, the budget expenditures to date, and identify any information requirements or decisions that need to be made by the City.

Monitor project activities for potential changes, anticipate changes whenever possible, and with the City's approval, modify project tasks and approach to keep the overall project within budget and on schedule.

104 Quality Assurance and Quality Control

Review all work activities and project deliverables for conformance with quality control requirements and project standards.

Monitor project activities for potential changes, anticipate changes whenever possible, and with the City's approval, modify project tasks and approach to keep the overall project within budget and on schedule.

Task Series 100 Deliverables

- Meeting Minutes will be prepared by HDR for the project initiation and team meetings and distributed to all team members.
- Memo summarizing project scope, objectives, fee and schedule.
- Action item log.
- Decision log.
- Monthly invoices and progress memorandum.

Task Series 100 City Provided Services and/or Information

- Attendance and input at meetings.
- Provide available data as requested by HDR.

Task Series 100 Assumptions

- Project initiation meeting will be a three-hour, in-person at City facilities
- A total of eight (8) one-hour project coordination meetings will be held.

TASK SERIES 200 – BASIS OF PLANNING

Collect and review City data as necessary for the project. Develop an understanding of pertinent systems. Data may include recent studies, master plans, utility plans, geotechnical data, survey, wetland information, flood plain, operational data, as-built drawings, operational data and permits.

Develop existing and future condition wastewater flows and distribute flows to the modeled collection system.

201 Review Record Drawings and Data Provided by the City

Collect and review relevant and available as-built drawings and flow/loading data. Obtain and review data pertinent to project completion including, but not limited to:

- As-built drawings of the facility including any other related drawings, specifications and O&M manuals.
- Existing utilities, survey, topography, wetlands, flood plain, and easement drawings.
- Review energy usage data.
- Influent and effluent flow and water quality data to provide basis for treatment alternative evaluation.
- Operational data to determine solids flows and loads.

202 Review Prior Engineering Studies Provided by the City

Collect and review relevant and available engineering studies. Obtain and review data pertinent to project completion including, but not limited to:

- Previously completed master plans, utility plans and relevant data for extraction of flow/load forecasts.

203 Develop Level of Service Goals

Identify City's level of service goals including treatment capacity, redundancy, and backup power.

204 Define the Wastewater Planning Boundaries

Delineate Wastewater Utility Service Area (WUSA) and Ultimate Planning Area (UPA) boundaries based on Evans Comprehensive Plan, topography, and adjacent municipal boundaries. Review wastewater planning boundaries with City staff. Validate WUSA and UPA boundary definition with the NFRWQPA to obtain buy-in prior to moving forward with planning analysis.

205 Develop Land Use and Population Projections

Establish existing and future condition population and employment using census data, Evans Comprehensive Plan, and the NFRMPO TAZ data. Develop a spatial distribution of existing population, employment and land use across the WUSA and UPA to serve as the basis of sanitary flow development. Identify non-sewered areas based on city GIS data for distribution of future condition sanitary flows. Summarize population projections in tabular format.

206 Characterize Wastewater Flows

Obtain average and peak day dry weather flow data for the Hill-n-Park WWTP. Review City's available population projections and prospective development including the City's Master Plan and Future Land Use map.

Develop sanitary unit flow factors for population, employment and future condition land uses. Compare the City's specific unit flow factors and previous planning values of 100 gallons per capita per day (gpcd) with NFRWQPA typical values. Determine impacts of water conservation, land use and development, economic trends and other factors on existing and forecasted demands. Identify and resolve inconsistencies.

Obtain recent peak wet weather flow data for the Hill-n-Park WWTP. Compare wet weather flow data on a gallon per day per acre (gpd/ac) basis with those used in the 2011 Wastewater Master Plan. Identify an inflow and infiltration (I&I) allowance based on a gpd/ac for existing and proposed sewer areas.

207 Develop Wastewater Flow Projections

Develop a spatial distribution of sanitary flow using the unit flow factors and GIS data for existing and future development conditions that incorporate population projections and land use coverages. Apply the I&I allowance based on gpd/ac using the non-sewer area coverage and land use data.

208 Regulatory Drivers

Prepare a critical analysis of forecasted regulatory requirements including Regulation 31 implementation. CDPHE staff will be consulted and discussions documented. Completed and on-going CDPHE studies, along with studies of others, will be considered in developing both short term and long range control strategies and capital improvement list to accomplish control strategies.

Identify water quality and effluent permit requirements driving treatment, effluent management and future biosolids reuse decisions. Develop a spectrum of probable, best and worst case regulatory scenarios that could affect the scope and extent of the treatment facilities. Identify the likely timeframe in which these scenarios would impact necessitate treatment modifications.

Identify the current and future (20 year planning horizon) regulatory drivers which will drive the City's capital improvements program over the next 20 years, which may include the following at a minimum:

- New and revised water quality standards (TIN, TN, ammonia, TP, selenium, arsenic, temperature, etc.)
- Biosolids drivers (Class A vs Class B)
- Storm Water Management Regulatory Drivers
- Toxins, Trace Organics or EDCs
- Floodplain

Develop a summary of the existing and future regulatory impacts possibly affecting the City's operations, which should include a comprehensive list of effluent requirements, air emissions, and biosolids regulations. Prepare a draft and final chapter of the master plan detailing the regulatory and other planning level drivers applicable through the study period.

Define regulatory agency coordination, permitting and approval requirements. This includes identification and preparation of required permits and will include CDPHE approval.

209 Prepare Chapter Summarizing Basis of Planning

Prepare an electronic draft technical memorandum summarizing the findings for Basis of Planning pertaining to this project. Previous task items will be summarized in the chapter.

Submit to NFRWQPA for review and obtain buy-in on results used for subsequent planning phases.

Task Series 200 Deliverables

- Wastewater planning area boundary map and supporting GIS data.
- Prepare an electronic draft technical memorandum summarizing the findings for Basis of Planning pertaining to this project.
- Prepare a final technical memorandum for inclusion into the Master Plan.

Task Series 200 City Provided Services and/or Information

- City staff will assist with review by providing all available drawings, specifications, reports, records and maps, plant record drawings, technical memo's, PDR, miscellaneous reports, geotechnical reports, plant site LOMR and a Utility Plan for use.
- Timely review of the draft memorandum and a consolidated set of comments.

TASK SERIES 300 – SEWER COLLECTION SYSTEM EVALUATION

Conduct an evaluation of the existing and future sewer interceptor and collector system. The evaluation will include mapping that identifies the interceptor, collector and local system pipes, development and calibration of a hydraulic model, model simulations to evaluate existing and future condition hydraulic capacities, and identification of recommended improvements.

301 Define Modeled System and Data Needs

Review the existing pipe and manhole GIS and identify the existing trunk and collector system per the NFRWQPA requirements. The trunk and interceptor system will be extended to serve the undeveloped areas within the WUSA and UPA based on topography and road network. Based on the limits of the existing modeled system, review the GIS pipe and manhole coverages to identify data gaps related to hydraulic modeling.

Develop a prioritized data collection plan that will include ground survey to establish rim elevations and missing inverts.

302 Update Hydraulic Model and Calibrate

Update the steady state model developed in 2011 with existing and future conditions using the project GIS integrated with the InfoSewer modeling software. Wastewater flows will be allocated to manholes using GIS spatial distribution of flows and Theiszen polygons for existing conditions and three future condition flow scenarios. Execute the model for existing dry weather flows and calibrate to wastewater plant flow meter data.

Execute calibrated dry weather model with I&I allowances for recorded storm events. Compare model peak flow to recorded peak at WWTP flow meter. Adjust sewershed I&I allowances to match WWTP meter data using GIS data on pipe material and age.

303 System Analysis and Improvement Recommendations

Execute model for existing conditions and identify existing condition hydraulic problems. Execute model for three future condition sanitary flow scenarios using the future collector and interceptor sewer alignment extensions developed in Task 200.

Identify hydraulic problems within the existing system for each future condition scenario and develop recommended pipe sizes for the future system extensions.

Estimated locations and sizes of potential lift stations needed to service the overall growth Area:

- One lift station needed on the south side of the river.
- A possible lift station needed at 17th Avenue and 42nd street to intercept flows from the west to reduce flows in an undersized pipe flowing through east Evans to the existing lift station at 1st Avenue and 37th Street. This versus trying to upsize the undersized pipe through East Evans and reconnect all the sewer services in the process – with a lot of old clay pipes in the residential neighborhoods
- A possible lift station south of 49th Street to service areas:
    - North of 54th Street road
    - West of 65th Avenue

- East of 95th Avenue that cannot be served by a gravity line extending west along 49th Street

Prepare thematic mapping of model results showing pipe capacity problems within the existing system. Overlay pipe condition (or age/material) information in thematic map to assist in existing condition problem assessment.

Develop improvements to the existing system using the WUSA developed flow scenario. Develop a geodatabase of system improvement elements, system design data (diameter, slope, etc) and hydraulic results for future use in coordinating CIP projects. Provide recommendations for flow and load monitoring in the basins.

304 Cost Estimating and Improvement Definition

Develop a unit cost database for pipe and manhole improvements based on line size and depth. Develop additional unit cost data for surface restoration, service line replacements, etc. Prepare planning level estimates of system improvement project costs including capital construction costs, land acquisition costs, engineering and administration costs and construction contingency estimates.

Prepare mapping identifying limits of collection system improvement project boundaries. Evaluate the priority of system improvements across the City using the project weighted prioritization matrix. Review initial project priorities with City in a workshop. Identify flow triggers and/or year for improvement scheduling.

305 Prepare Collection System Evaluation TM

Prepare a TM and supporting mapping summarizing the collection system evaluation process and recommendations. Submit to the City for review and comment.

Task Series 300 Deliverables

- Existing trunk and interceptor mapping with future system extensions.
- Collection System Evaluation TM and supporting GIS.

Task Series 300 City Provided Services and/or Information

- Timely review of the draft memorandum and a consolidated set of comments.

TASK SERIES 400 – EVALUATION OF WASTEWATER TREATMENT PLANT

The objective of this work effort is to assist the City in evaluating and rating the Hill-n-Park Wastewater Treatment Plant (WWTP), determine improvements required to meet future flows/loads/permitting. Using volumetric flow, biochemical oxygen demand (BOD), total suspended solids (TSS), phosphorous and nitrogen loading developed on a per capita basis, project average flow and load conditions for the 20-year planning period.

Projected flow and loading conditions will be compared to the existing and currently planned design capacity of the treatment facilities and solids handling systems to determine the adequacy of each treatment facility to treat the updated flow and loading from the planned population, commercial, and industrial uses developed in Task 200. Standards for evaluation will include the CDPHE Policy WPC-DR-1, Design Criteria for Domestic Wastewater Treatment Works.

401 Wastewater Characterization

Compile and analyze the monthly reports for the Hill-N-Park WWTP including flow, influent and effluent constituents, consistency of BOD5, suspended solids (SS), phosphorus and nitrogen (total kjeldahl nitrogen, ammonia, and nitrates/nitrites as available). Disinfection performance will also be analyzed where data is available. Recommendations for additional sampling (if any) will be identified.

Evaluate average and peak day dry weather flow data. Develop projected average/max month/peak hour flows and loads conditions for the next 20-year.

402 Existing Plant Utilization

Compare the existing sewer flow and loading per capita analysis with design "nameplate" capacity of each unit process. Identify capacity restrictions in the unit process and determine when they will occur. Develop treatment plant utilization schedule (table) that will be used for projection of current capacity utilization and remaining capacity.

403 Liquid Stream Process Performance Evaluation and Alternatives Analysis

Review existing planning, and design documents, operating plans, optimization testing reports and meet with staff to understand the current operations and issues for the City. Include an optimization study - plant capacity study in the plan to determine bottlenecks and problems needing resolution. Evaluate existing geotechnical report, site survey, wetlands evaluation, flood plain, review related and pertinent construction drawings, operational data, flows, wastewater quality information, alternative energy evaluation, and any other related information.

Based on the City provided existing flows and loads and using volumetric flow, biochemical oxygen demand (BOD), chemical oxygen demand (COD), total suspended solids (TSS), phosphorous and nitrogen loading developed on a per capita basis; evaluate treatment and hydraulic capacity of facility including influent pump station, headworks, bioreactors, secondary clarifiers, and UV disinfection. Include recommendations for minor equipment/control revisions that will allow the plant to continue operation during planning and design.

The evaluation shall include a table of current flow and loading conditions versus the rated capacity of the unit process as required for future CDPHE Regulation 22 submittals. The analysis will identify capacity restrictions in the unit process and will determine when they will occur. Evaluate technologies to increase the organic loading of the secondary treatment system.

Update BioWin process model (HDR has assumed that the previous BioWin model will be provided), hydraulic model, and solids mass balance based on plant data, design reports from previous projects, and HDR experience with similar projects. Determine expansion and improvements necessary to meet the need of growth and CDPHE Regulation 31 nutrient limits.

Prepare a draft and final chapter of the master plan detailing the capacity of the existing facility. Work collaboratively with City staff which includes solicitation of input from operations staff to review the scope of required services, design criteria, and expectations. This will provide background information on the existing plant and desires of operation staff.

Develop a matrix of available technology/process, conduct a preliminary screening analysis of these options. Conduct a workshop and present the technology matrix and the preliminary analysis. At the conclusion of this workshop, the team will establish alternatives for further development.

Prepare preliminary design/layout considering proven innovation, creativity, existing site conditions and the most cost-effective and feasible alternative for meeting and/or exceeding limits established in the most recent permit and future regulations. Provide lists of equipment and key features. Report conceptual design criteria to clearly indicate the considerations involved.

Include a Capital Improvements Schedule that projects required treatment plant upgrades that are tied to operational needs, permitting, and finally capacity due to growth. Develop planning level costs for treatment plant improvements. Evaluate the priority of improvements using the project weighted prioritization matrix. Review initial project priorities with City in a workshop.

404 Solids Stream Process Performance Evaluation and Alternatives Analysis

Based on the existing and future flows and loads; determine solids handling options for thickening, digestion, dewatering, loadout and land application. Develop solids mass balance based on plant data, design reports from previous projects, and HDR experience with similar projects. Determine expansion and improvements necessary to meet the need of growth and Class A vs B biosolids. The evaluation shall include an evaluation of technologies, layout of each option, development of pros/cons, and selection for long term solids handling.

Develop a matrix of available technology/processes, conduct a preliminary screening analysis of these options. Conduct a workshop and present the technology matrix and the preliminary analysis. At the conclusion of this workshop, the team will establish alternatives for further development.

Prepare preliminary design/layout considering proven innovation, creativity, existing site conditions and the most cost-effective and feasible alternative for meeting and/or exceeding drivers. Provide lists of equipment and key features. Report conceptual design criteria to clearly indicate the considerations involved.

Include a Capital Improvements Schedule that projects required treatment plant upgrades that are tied to operational needs, permitting, and finally capacity due to growth. Develop planning level costs for solids handling. Evaluate the priority of improvements using the project weighted prioritization matrix. Review initial project priorities with City in a workshop.

405 Monetary and Non-monetary Evaluation

Prepare planning level cost estimates with probable ranges of values for recommended alternatives. Include project costs including capital construction costs, land acquisition costs, engineering and administration costs, O&M costs and construction contingency estimates. Evaluate improvements using the project weighted prioritization matrix and initial project priorities will be reviewed with the City in a workshop. Summarize in a graph the capital project costs versus planning period for future budgeting purposes. Develop non-monetary criteria, including environmental impacts for evaluating the alternatives.

406 System Recommendations and Capital Improvements Plan

Prepare preliminary design/layout considering proven innovation, creativity, existing site conditions and the most cost-effective and feasible alternative for meeting and/or exceeding limits established in the most recent permit and future regulations. Provide lists of equipment and key features. Report conceptual design criteria to clearly indicate the considerations involved.

Prepare plan for implementation of the recommended alternatives. Plan will include a description of the recommended projects and their priorities.

Identify flow triggers and/or year for improvement scheduling. Summarize/graph capital project costs versus planning period for future budgeting purposes. Develop capital improvements schedule that includes prioritization, capital costs, and potential external funding sources.

407 Workshops

Conduct alternatives evaluation workshop(s) with City's project team to present progress reports, discuss recommended alternatives. Workshops will be provided for each of the chapters in the Wastewater Utility Master Plan. It is anticipated that at a minimum of four (4) three-hour workshops will be included as some of the chapters will be presented together.

408 Prepare Wastewater Treatment System Evaluation TM

Prepare a TM summarizing the treatment system evaluation process and recommendations. Submit to the City for review and comment.

Task Series 400 Deliverables

- Electronic draft in .pdf format of the Wastewater Utility Master Plan chapters for City review and comment.
- Final Wastewater Utility Master Plan, including all exhibits, in .pdf format.
- Updated Utility Plan, including all exhibits, in .pdf format.

Task Series 400 Assumptions

- Depending on findings and developments through the course of the project, final recommendations may be held until the Wastewater Utility Master Plan is in Draft format and may not provided in the draft chapters.
- City will provide planning information as noted in Task 301.
- Potholing and survey of utilities is not required or included.

Task Series 400 City Provided Services and/or Information

- City will provide review comments on the Draft chapters to HDR with a single document using track changes or single marked up hard copy.
- Provide available record drawings and access to the site.
- Utility locating will be provided by the City if needed.

TASK SERIES 500 – WASTEWATER UTILITY MASTER PLAN

Develop final Wastewater Utility Master Plan document summarizing the previous task items. Wastewater Utility Master Plan will be submitted to NFRWQPA for review and approval.

501 Wastewater Utility Master Plan

The data collected and evaluations conducted in the previous tasks will be assembled into a single Wastewater Utility Master Plan document in accordance with the NFRWQPA Guidance Manual. In addition, a combined capital improvements schedule including recommended capital improvements will be assembled into a summary report. These chapters will form the Wastewater Utility Master Plan and be structured similar to the following outline:

Executive Summary
Chapter 1 Basis of Planning (Existing and Future Conditions)
Chapter 2 Wastewater Characterization
Chapter 3 Regulatory Drivers
Chapter 4 Liquid Stream Process Performance Evaluation and Alternatives Analysis
Chapter 5 Solids Stream Process Performance Evaluation and Alternatives Analysis
Chapter 6 Service Area Improvements
Chapter 7 System Management and Financial Plan
Chapter 8 NFRWQPA 208 Regional Data Summary
Chapter 9 System Recommendations and Capital Improvements Plan
Appendices

Draft versions of the master plan will be submitted to the City for review and comment on an intermittent basis as portions are completed. A complete formal draft will be submitted at the 90 percent level of completion for review and comment prior to finalizing the plan.

HDR will present the Plan to NFRWQPA, CDPHE, and adjacent municipalities to provide education as to the status of the Utility Plan and gain buy-in early to facilitate final approval on schedule. It is assumed these meetings will be virtual. Draft versions of the Utility Plan will be submitted to the City, NFRWQPA, and CDPHE for review and comment at the 90 percent level of completion prior to finalizing the plan.

Task Series 500 Deliverables

- Electronic draft in .pdf format of the Wastewater Utility Master Plan chapters for City review and comment.
- Final Wastewater Utility Master Plan, including all exhibits, in .pdf format.

Task Series 500 City Provided Services and/or Information

City will provide review comments on the Draft chapters to HDR with a single document using track changes or single marked up hard copy.

TASK SERIES 600 – STAKEHOLDER INVOLVEMENT

The objective of this task is to obtain stakeholder input and buy-in; provide education as to the existing condition of the City sewer utilities; coordinate with the NFRWQPA, CDPHE, and adjacent municipalities; and provide updates and presentations to City Council.

601 Agency Meetings

HDR will meet with NFRWQPA, CDPHE, to provide education as to the status of the Wastewater Utility Plan and gain buy-in early to facilitate final approval on schedule. A separate meeting with NRRWQPA will be held to present the final 208 Plan.

Additionally, meetings with the Town of Milliken, Town of LaSalle, and the City of Greeley will be held to discuss the 208 boundary, service opportunities, and potential for regionalization. These meetings are assumed to be virtual.

602 City Council and Sewer Board Presentations

HDR will prepare materials for and facilitate two presentations for the City Council and the Sewer Board to discuss the following subjects:

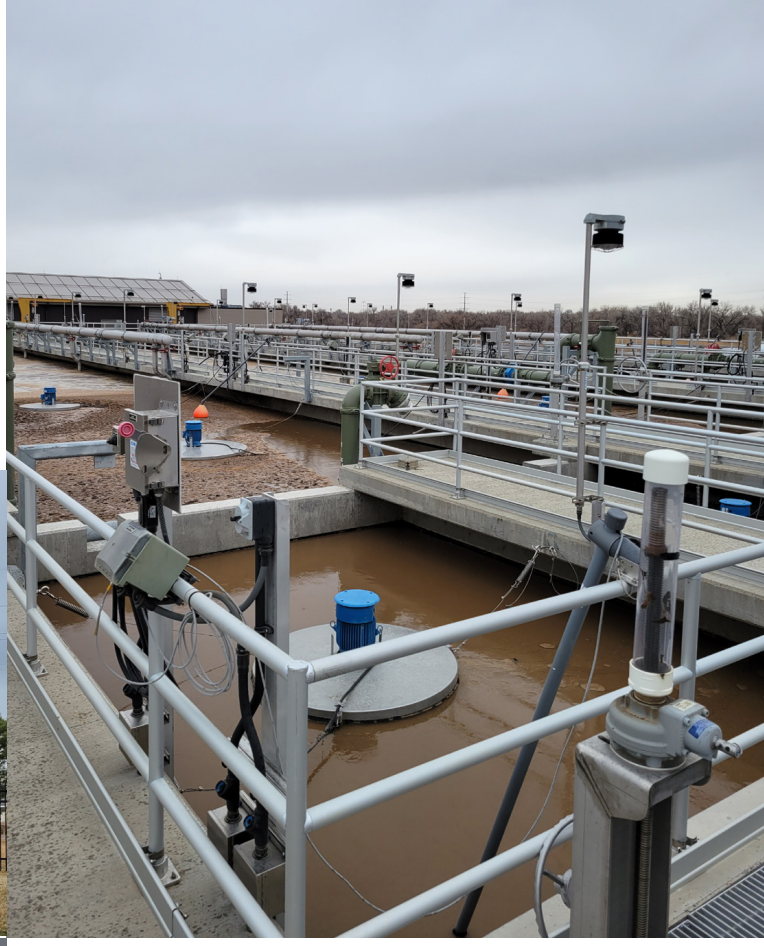
- Existing system evaluation and Basis of Planning.
- Future system expansion requirements and alternatives.
- System recommendations.
- Capital Improvement program and financial evaluation.

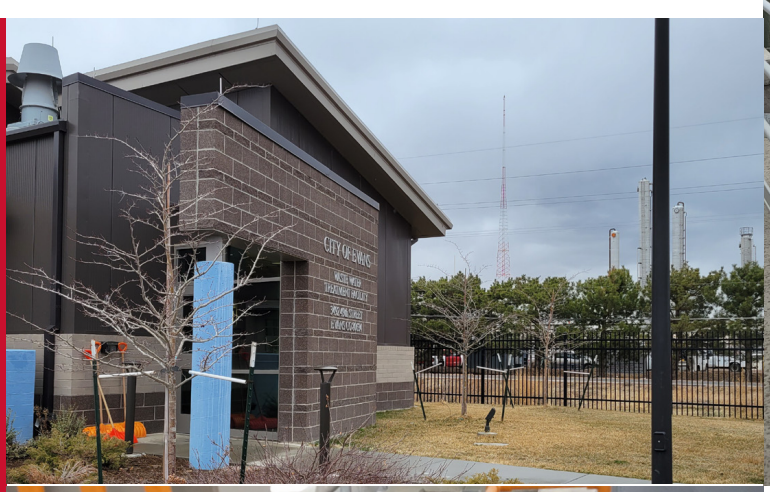
Task Series 600 Deliverables

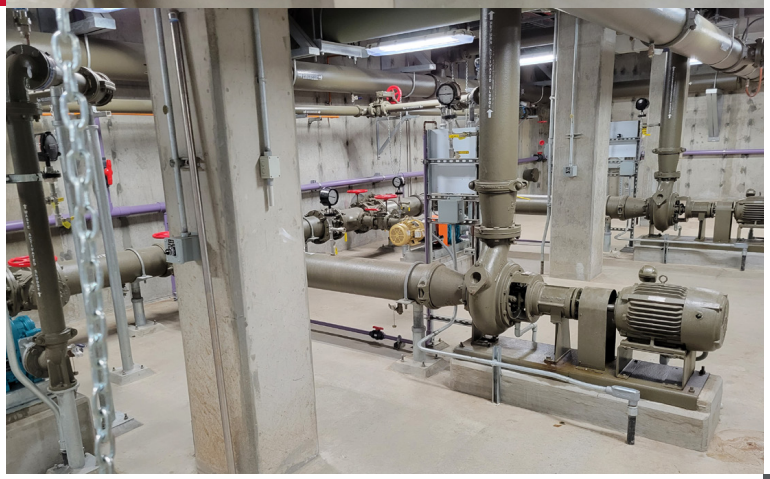
- Agendas and minutes for meetings.
- Slides for presentations.

Exhibit B
Fee Schedule

EXHIBIT B







Fee Proposal

Wastewater Utility Master Plan

City of Evans, Colorado

April 21
2022

April 21, 2022

City of Evans, Wastewater
1100 37th Street
Evans, CO 80620-2036
submitted via email to: Robby Porsch, Wastewater Superintendent (rporsch@evanscolorado.gov) with cc to Todd Hepworth, Civil Engineer (thepworth@evanscolorado.gov)

RE: Proposal for 2022 Wastewater Utility Plan

Dear Mr. Porsch, Mr. Hepworth, Mr. Oberschmidt and Selection Committee Members:

Enclosed are our proposed Scope of Services and Engineering Fee Proposal for the 2022 Wastewater Utility Master Plan project. We are looking forward to the opportunity to discuss the proposed scope with you further, following selection.

Please note the direct costs such as printing are billed without mark-up and mileage is billed at the IRS-allowable rate. We have King Surveyors as the only subcontractor on the team on an "as needed" basis so estimated direct costs are not yet established. Additionally, we have included an optional task to perform a financial evaluation of the wastewater utility. Recommendations for modifications to existing fees and alternative rate structures will be provided as well as recommendations on possible external funding sources for planned capital improvements.

Sincerely,
HDR Engineering, Inc.

Matt Gough, PE (CO 41919)
Vice President | Project Manager

Kenneth J. Lowrey, PE (CO 37610)
Vice President | Project Principal

R. Bradley Martin, PE (CO 53191)
Senior Vice President

hdrinc.com

419 Canyon Avenue, Suite 316, Fort Collins, Colorado 80521-2670
T 970.416.4400

City of Evans 2022 Wastewater Utility Master Plan

Estimated Fee Effort
City of Evans 2022 Wastewater Utility Master Plan

	Task Description	Project Manager - Matt Gough	QC - JB Neethling/ Mike Gossett	WWUMP Lead/ Regulatory - Kevin Greer	WWTP Modeling/ Assessment - Dmitriy Zinchenko	Collection System/GIS/ Modeling - Jeff Christopherson	Lift Stations - Robert Moore	Project Engineer - Madeleine Harris	Financial Evaluation- Shawn Koorn	Electrical - Magnolia Cook	I&C - Bill Cassity/Nohemi Almaraz	Structural - Juan Coronado	Administrative - Velasquez	Project Accountant - Fuller	HDR Hours	HDR Labor	Vehicle Mileage	HDR Total Expenses	Total Subconsultant Fees	Total Fee
		$ 280	$ 280	$ 215	$ 205	$ 171	$ 171	$ 123	$ 280	$ 114	$ 160	$ 198	$ 100	$ 136						
Task 100	**Project Management**																			
101	Project Initiation Team Meeting	3		6	6	6		6							27	$ 5,121		$ -	$ -	$ 5,121
102	Conduct Coordination Meetings (8 total)	16		16	8	8									48	$ 10,925	$ 500	$ 500	$ -	$ 11,425
103	Project Monitoring and Monthly Invoicing	16												16	32	$ 6,659		$ -	$ -	$ 6,659
104	Quality Assurance/Quality Control		16												16	$ 4,480		$ -	$ -	$ 4,480
	Sub-total	**35**	**16**	**22**	**14**	**14**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**16**	**123**	**$ 27,185**	**$ 500**	**$ 500**	**$ -**	**$ 27,685**
Task 200	**Basis of Planning**																			
201	Review Record Drawings and Data Provided by City			2	2	2									6	$ 1,181		$ -	$ -	$ 1,181
202	Review Prior Engineering Studies Provided by City			2	2	2									6	$ 1,181		$ -	$ -	$ 1,181
203	Level of Service Goals	1		4											5	$ 1,140		$ -	$ -	$ 1,140
204	Define the Wastewater Planning Boundaries			4		8									12	$ 2,225		$ -	$ -	$ 2,225
205	Develop Land Use and Population Projections					8									8	$ 1,365		$ -	$ -	$ 1,365
206	Characterize Wastewater Flows	1		4	8			6							19	$ 3,517		$ -	$ -	$ 3,517
207	Develop Wastewater Flow Projections	1		4	4										9	$ 1,960		$ -	$ -	$ 1,960
208	Regulatory Drivers	1		6	2										9	$ 1,980		$ -	$ -	$ 1,980
209	Prepare Chapter Summarizing Basis of Planning			6	8	16		8					1		39	$ 6,744		$ -	$ -	$ 6,744
	Sub-total	**4**	**0**	**32**	**26**	**36**	**0**	**14**	**0**	**0**	**0**	**0**	**1**	**0**	**113**	**$ 21,293.94**	**$ -**	**$ -**	**$ -**	**$ 21,294**
Task 300	**Sewer Collection System Evaluation**																			
301	Define Modeled System and Data Needs					8									8	$ 1,365		$ -	$ -	$ 1,365
302	Update Hydraulic Model and Calibrate					32									32	$ 5,461		$ -	$ -	$ 5,461
303	System Analysis and Improvement Recommendations					32									32	$ 5,461		$ -	$ -	$ 5,461
304	Cost Estimating and Improvement Definition					32									32	$ 5,461		$ -	$ -	$ 5,461
305	Prepare Collection System Evaluation TM					40							1		41	$ 6,926		$ -	$ -	$ 6,926
	Sub-total	**0**	**0**	**0**	**0**	**144**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**145**	**$ 24,674**	**$ -**	**$ -**	**$ -**	**$ 24,674**
Task 400	**Evaluation of Wastewater Treatment Plant**																			
401	Wastewater Characterization	2		8	12										22	$ 4,740		$ -	$ -	$ 4,740
402	Existing Plant Utilization	3		4	8			8		4	4	4			35	$ 6,212		$ -	$ -	$ 6,212
403	Liquid Stream Process Performance Evaluation and Alternatives Analysis	2		8	12			24							46	$ 7,689		$ -	$ -	$ 7,689
404	Solids Stream Process Performance Evaluation and Alternatives Analysis	2		8	12			24							46	$ 7,689		$ -	$ -	$ 7,689
405	Monetary and Non-monetary Evaluation	2		8	8										18	$ 3,920		$ -	$ -	$ 3,920
406	System Recommendations and Capital Improvements Plan	2		16	12			4							34	$ 6,952		$ -	$ -	$ 6,952
407	Workshops	20		20	10	10									60	$ 13,657	$ 500	$ 500	$ -	$ 14,157
408	Prepare Wastewater Treatment System Evaluation TM	2		26	24			40		6	6	6	1		111	$ 18,919		$ -	$ -	$ 18,919
	Sub-total	**35**	**0**	**98**	**98**	**10**	**0**	**100**	**0**	**10**	**10**	**10**	**1**	**0**	**372**	**$ 69,778**	**$ 500**	**$ 500**	**$ -**	**$ 70,278**
Task 500	**Wastewater Utility Master Plan**																			
501	Wastewater Utility Master Plan	8		16	16	8		24		4	4	4	8		92	$ 15,964		$ -	$ -	$ 15,964
	Sub-total	**8**	**0**	**16**	**16**	**8**	**0**	**24**	**0**	**4**	**4**	**4**	**8**	**0**	**92**	**$ 15,964**	**$ -**	**$ -**	**$ -**	**$ 15,964**
Task 600	**Stakeholder Involvement**																			
601	Agency Meetings	8		8											16	$ 3,960	$ 100	$ 100	$ -	$ 4,060
602	City Council and Sewer Board Presentations	8		8								0			16	$ 3,960	$ 100	$ 100	$ -	$ 4,060
603	Plan Adoption	2		2								0			4	$ 990	$ 100	$ 100	$ -	$ 1,090
	Sub-total	**18**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**36**	**$ 8,910**	**$ 300**	**$ 300**	**$ -**	**$ 9,210**
	Hours	**100**	**16**	**186**	**154**	**212**	**0**	**144**	**0**	**14**	**14**	**14**	**11**	**16**	**881**					
	Fee	**$28,000**	**$4,480**	**$39,990**	**$31,570**	**$36,179**	**$0**	**$17,695**	**$0**	**$1,595**	**$2,240**	**$2,777**	**$1,100**	**$2,179**		**$ 167,805**	**$ 1,300**	**$ 1,300**	**$ -**	
																				$ 169,105