AGENDA ITEM
December 4, 2018

Subject: Agreement for Engineering Services

Department: Administration

This ordinance will approve the attached agreement with Allgeier, Martin & Associates of Joplin, Missouri, for a study of the City's waste water system. The agreement is for an amount not to exceed $60,000. This project is 80% funded by a SCEAP grant from the Missouri DNR.

BILL NO. 2018-036 **ORDINANCE NO. 8243**

A SPECIAL ORDINANCE OF THE CITY OF NEVADA, MISSOURI, AUTHORIZING THE EXECUTION OF AN AGREEMENT WITH ALLGEIER, MARTIN AND ASSOCIATES, OF JOPLIN, MISSOURI FOR ENGINEERING SERVICES.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NEVADA, MISSOURI, THAT:

Section 1. The agreement attached hereto as Exhibit "A" and incorporated herein by reference, between the City of Nevada and Allgeier, Martin and Associates, of Joplin, Missouri, is hereby approved.

Section 2. The Mayor is hereby authorized and directed to execute the attached agreement and documents relating to agreement. The City Clerk is hereby authorized and directed to seal and attest the attached agreement.

Section 3. This ordinance is in full force and effect after its passage.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Nevada, Missouri, this 18th day of December, 2018.

_____
(seal) Brian L. Leonard, Mayor
ATTEST:

_____
Johnna Williams, City Clerk

AGREEMENT*
BETWEEN
THE CITY OF NEVADA, MISSOURI
AND
ALLGEIER, MARTIN & ASSOCIATES, INC.
FOR
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT made as of _____, 2018 between the City of Nevada, Missouri (OWNER) and Allgeier, Martin and Associates, Inc., a Missouri corporation located in Joplin, Missouri (ENGINEER). OWNER intends to prepare an Engineering Report to evaluate and plan for addressing inflow and infiltration (I/I) in the collection system, hereinafter called the Project.

OWNER and ENGINEER in consideration of their mutual covenants herein agree in respect of the performance of professional engineering services by ENGINEER and the payment for those services by OWNER as set forth below.

ENGINEER shall provide professional engineering services for OWNER in all phases of the Project to which this Agreement applies, serve as OWNER's professional engineering representative for the Project as set forth below, and shall give professional engineering consultation and advice to OWNER during the performance of services hereunder.

SECTION 1 - BASIC SERVICES OF ENGINEER

1.1 General

1.1.1 ENGINEER shall perform professional services as hereinafter stated which include customary civil, structural, and mechanical, engineering services.

1.1.2 The ENGINEER shall represent the OWNER, insofar as the OWNER desires, to governmental entities and agencies, institutions, and other individual and collective parties in dealings related to the Project.

1.1.3 The ENGINEER shall attend up to two meetings with and on behalf of the OWNER, insofar as the OWNER desires, provided that such meetings and hearings pertain to the Project and provided that the OWNER gives the ENGINEER reasonable notice of such meetings and hearings and of the OWNER's desire to have the ENGINEER in attendance.

* This agreement is modeled after the standard form of agreement prepared and published by the National Society of Professional Engineers, the American Consulting Engineers Council, and the American Society of Civil Engineers.

1.2 Engineering Evaluation and Report

Upon execution of this agreement, the ENGINEER shall:

1.2.1 Compile data related to current wastewater generation, including, but not limited to average and peak flows.

1.2.2 Provide estimates of growth in Nevada and its service area, and translate this growth into an estimated future demand on the OWNER's wastewater collection systems.

1.2.3 Establish design criteria for improvements to the wastewater treatment facilities and collection system.

1.2.4 Based upon data compiled and design criteria established, evaluate portions of the treatment and collections system's ability to meet current and anticipated future flows and loads.

1.2.5 Collection System Flow Monitoring: Develop a flow monitoring program consisting of up to ten (10) flow meters and two (2) rain gauges, located to capture tributary and cumulative flows across the OWNER's wastewater collection system with focus mainly on the North Basin. The flow meters and rain gauges will be installed for a period of sixty (60) days in anticipation of collecting adequate data to enable wastewater collection system hydraulic model dry- and wet-weather calibration and verification. If sufficient wet and dry weather events are collected for data analysis and calibration within the first 60-days of monitoring, flow monitoring will cease. However, if sufficient data is not collected during the initial 60-day period, a recommendation may be made to extend flow monitoring for a further 30-day period, or until sufficient data is captured.

1.2.5.1 Suitability for Accurate Metering: The accuracy of the open channel flow metering will depend on numerous variables and it is imperative that they be controlled as much as possible. For this reason, the reconnaissance inspections will be performed to identify the best sites for metering and to minimize such error-causing factors as changes in pipe alignment and size, interruption of channel flow by side inlets and turbulence caused by uneven channels.

1.2.5.2 Safety: It is equally important that the proposed sites conform to typical industry standard requirements for safe operating conditions. If the site falls outside of these requirements, an alternate site that is suitable based on safety requirements will be selected upon further consultation with AMA and the OWNER.

1.5.2.3 A site assessment form for the flow location and the rainfall monitoring locations shall be completed. Ten (10) electronic depth/velocity flow meters (ISCO 2150) shall be provided. Two (2) tipping-bucket rainfall recorders within, or within close proximity to, the Study Area during the same time frame shall also be provided.

1.5.2.4 Flow Monitoring (60-day period): The flow monitor shall be maintained as needed. Maintenance shall include the upload and interrogation of all flow data, meter calibration (as needed), velocity profiling, and other diagnostic checks. Field data will be collected and reviewed and meter maintenance coordinated as required to minimize down time and data gaps. Malfunction of metering equipment can occur because of debris in the sewers, damage from storm events, and water level conditions. All monitors shall be removed at the conclusion of the monitoring period.

1.2.5.5 Upon completion of the base period, the meters will be removed unless it is recommended and approved by the OWNER to keep them in place. Justification for extended metering will be

due to insufficient rainfall, or dry days, during the monitoring period. Compensation for additional flow metering service and calibration shall be at a unit price to be negotiated between the OWNER and AMA.

1.2.5.6 Rainfall Monitoring (60-day period): Two (2) continuous recording, electronic rain gauges will be installed, serviced, and maintained within the Study Area during the same 60-day base monitoring period. The gauges will record rainfall to one hundredths of inch increments. The instruments will be checked and downloaded as needed.

1.2.6 Break down the collection system into drainage basins and evaluate past and current information related to inflow and infiltration in these drainage basins in order to attempt to rank each of the basins in terms of inflow and infiltration severity.

1.2.7 Pick a drainage basin in the collection system thought to have the highest severity of inflow and infiltration and create a plan to perform smoke testing and/or acoustic sounding in order to assist in evaluating inflow and infiltration problems and pinpointing the most likely portions of the basin that require further investigation and repair.

1.2.8 Propose an approach to evaluate inflow and infiltration issues on both the public and private side of the line within the portion of the basin identified to have the highest severity of I/I.

1.2.9 Notwithstanding Section 1.1.3, meet with the OWNER's representatives to discuss the findings and to identify needs for additional data.

1.2.10 Prepare a map or exhibits that graphically illustrate the recommended improvements.

1.2.11 Provide opinions of capital and operation and maintenance costs of alternatives evaluated for improvements to the system.

1.2.12 Draft an Engineering Report that presents and documents the conclusions and recommendations of the ENGINEER. The Report will contain, in addition to other information, the ENGINEER's opinion of capital and operation and maintenance costs of the alternatives studied and a recommendation of the optimum alternative. The Report will be completed in accordance with 10 CSR 20-8.110 Engineering Reports, Plans and Specifications.

1.2.13 Submit copies of the Report to the Missouri Department of Natural Resources and other appropriate federal, state, and local agencies as may be required or appropriate for their review and commentary.

SECTION 2 - ADDITIONAL SERVICES OF ENGINEER

2.1 General

If authorized in writing by OWNER, ENGINEER shall furnish or obtain from others additional services of the following types which are not considered normal or customary basic services; these will be paid for by OWNER as indicated in Section 5.

2.1.1 Preparation or review of environmental assessments and impact statements; water quality reviews and antidegradation assessments; assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project, and review and evaluation of the effect on the design requirement of the Project of any such statements and documents prepared

by others.

2.1.2 Services to verify the accuracy of drawings or other information furnished by OWNER.

2.1.3 Services resulting from significant changes in extent of the Project including, but not limited to, changes in size, complexity, OWNER's schedule, or character of construction or method of financing; and revising previously accepted studies, facility plans, reports, design documents or contract documents when such revisions are due to causes beyond ENGINEER's control.

2.1.4 Providing any type of field and engineering surveys and staking.

2.1.5 Investigations involving detailed consideration of operations, maintenance and overhead expenses; providing value engineering during the course of design; the preparation of feasibility studies, cash flow, and economic evaluations, rate schedules, evaluating processes available for licensing and assisting OWNER in obtaining process licensing; detailed quantity surveys of material, equipment, and labor; and audits or inventories required in connection with construction performed by OWNER.

2.1.6 Furnishing the services of special consultants for other than what is required to perform the inflow and infiltration data collection as defined in the scope of services.

2.1.7 If recommended improvements to the wastewater treatment system include a new or expanded regulated discharge, an antidegradation review will be required as part of the Engineering Report. Such antidegradation review will be an additional service.

2.1.8 Services after completion of the Engineering Report.

2.1.9 Preparing to serve or serving as a consultant or witness for OWNER in any litigation, public hearing, or other legal or administrative proceeding involving the Project (except as agreed to under basic services).

2.1.10 Additional services in connection with the Project, including services normally furnished by OWNER and services not otherwise provided for in this agreement.

2.1.11 Detailed studies and investigations to identify sources of inflow and infiltration throughout the entire collection system.

SECTION 3 – OWNER'S RESPONSIBILITIES

OWNER shall:

3.1 Provide all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the drawings and specifications.

3.2 Assist ENGINEER by placing at his disposal all available information pertinent to the Project, including previous facility plans, reports, geotechnical facility plans, site surveys, and any other data relative to construction of the Project.

3.3 Furnish to ENGINEER, as required for performance of ENGINEER's basic services data prepared by or services of others, including without limitation, GIS data, all existing wastewater system studies, system water production and usage data, past treatment facility wastewater influent and discharge flow rates, past MDNR violations or citations, current MDNR facility permit limits, past data on the facility influent and effluent quality such as BOD, TSS, nutrient levels, etc.; rate structures, number of customers for respective wastewater usage categories, system maps, facility plans, and other available data and services of others pertinent to the Project, core borings, probings, and subsurface explorations, hydrographic surveys, laboratory tests and inspections of samples, materials, and equipment; archaeological investigations; appropriate professional interpretations of all of the foregoing; environmental assessment and impact statements; zoning, deed and other land use restriction; and other special data or consultations not covered in Section 2; all of which ENGINEER may rely upon in performing his services.

3.4 Arrange for access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform his services. This includes removing obstructions on top of or near the existing sewer line and associated manholes that prevent data from being obtained, and assisting in locating existing sewer lines and manholes.

3.5 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.

3.6 Provide such accounting, independent cost estimating, and insurance counseling services as may be required for the Project and such legal services as OWNER may require or ENGINEER may reasonably request with regard to legal issues pertaining to the Project.

3.7 Designate in writing a person to act as OWNER's representative with respect to the services to be rendered under this agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define OWNER's policies and decisions with respect to materials, equipment, elements, and systems pertinent to ENGINEER's services.

3.8 Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of any development that affects the scope or timing of ENGINEER's services.

3.9 Furnish, or direct in writing ENGINEER to provide necessary additional services as stipulated in Section 2 of this agreement or other services as required.

3.10 Receive, review, and accept the Engineering Report as provision of service by the ENGINEER, or otherwise relate to ENGINEER amendments needed to render the document acceptable to the OWNER.

3.11 Bear all of the OWNER’s costs incidental to compliance with the requirements of this Section 3.

SECTION 4 - PERIOD OF SERVICE

4.1 The provisions of this Section 4 and the various rates of compensation for ENGINEER's services provided for elsewhere in this agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion of the Engineering Report. ENGINEER's obligation to render services hereunder will extend for a period which may reasonably be required for the Project.

4.2 All engineering services provided under Sections 1.2 of this Agreement shall be completed within 18 months after receipt by the ENGINEER of written authorization to proceed. However, the failure of the OWNER to fulfill those responsibilities identified above in a timely manner shall be cause for extension of the Consultant’s period of service.

4.3 If OWNER has requested significant modifications or changes in the extent of the Project, the time of performance of ENGINEER's services and ENGINEER's maximum fee shall be adjusted appropriately as provided in Section 8.2.

SECTION 5 - PAYMENTS TO ENGINEER

5.1 Methods of Payment for Services and Expenses of Engineer

5.1.1 For each element of the engineering services set forth in the following paragraphs 5.1.1.2 through 5.1.1.3, OWNER shall pay ENGINEER as described:

5.1.1.1 Engineering Report and Evaluation: OWNER shall pay ENGINEER for services stated in paragraph 1.2 in preparation of the Engineering Report, a total amount of $60,000 that may not be exceeded except by an amendment.

5.1.1.2 Additional Services. OWNER shall pay ENGINEER for additional services rendered under Section 2 on the basis of labor rates and reimbursable expenses shown in Exhibit A, but not before an amendment is approved.

5.1.1.3 The term "Reimbursable Expenses" will have the meaning assigned to it in paragraph 5.4 below.

5.2 Times of Payments

5.2.1 ENGINEER shall submit no more than six statements for basic services rendered. OWNER shall make prompt monthly payments in response to ENGINEER's monthly statements.

5.3 Other Provisions Concerning Payments

5.3.1 OWNER shall make prompt payments in response to ENGINEER's statements. If OWNER fails to make any payment due ENGINEER for acknowledged services and expenses within sixty days after receipt of ENGINEER's bill therefor, the amounts due ENGINEER shall include a charge at the rate of 1% per month from said sixtieth day and in addition, ENGINEER may, after giving seven days' written notice to OWNER, suspend services under this agreement until he has been paid in full all amounts due him for services and expenses. The 1% per month charge shall not be applied to ENGINEER's charges for services that are contested by the OWNER.

5.3.2 In the event of termination by OWNER under paragraph 7.1, ENGINEER will be paid for services rendered to date of termination by principals and employees assigned to the Project. In the event of any such termination, ENGINEER will be paid for all unpaid additional services and unpaid reimbursable expenses, plus all termination expenses, subject to the OWNER's receipt of a written statement for such services and expenses from the ENGINEER within thirty (30) days of termination.

5.4 Definitions

Reimbursable expenses mean the actual expenses incurred directly in connection with the Project for: transportation, lodging, and subsistence incidental thereto, limited to applicable IRS allowances; reproduction of facility plans, reports, drawings, and specifications; postage and express delivery services; survey materials; and similar Project-related items.

SECTION 6 - OPINIONS OF COST

6.1 Opinions of Cost

Since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, his opinions of probable Project costs and construction cost provided for herein are to be made on the basis of his experience and qualifications and represent his best judgment as an experienced and qualified professional engineer, familiar with the construction industry; but Engineer cannot and does not guarantee that proposals, bids, or actual Project or construction cost will not vary from opinions of probable cost prepared by him. If prior to the bidding or negotiating phase, OWNER wishes greater assurance as to Project or construction cost he shall employ an independent cost estimator as provided in Section 3.

SECTION 7 - GENERAL CONSIDERATIONS

7.1 Termination

The obligation to provide further services under this agreement may be terminated by either party upon seven days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

7.2 Reuse of Documents

All documents, including drawings and specifications prepared by ENGINEER pursuant to this agreement are instruments of service in respect of the Project. They are not intended or represented to be suitable for reuse by OWNER or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER; and to the extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER from all claims, damages, losses, and expenses including attorneys' fees arising or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

7.3 Controlling Law

This agreement is to be governed by the laws of the State of Missouri.

7.4 Successors and Assigns

7.4.1 To the extent permitted by law, OWNER and ENGINEER each binds himself and his partners, successors, executors, administrators, assigns, and legal representatives to the other party to this agreement and to the partners, successors, executors, administrators, assigns and legal representatives of such other party, in respect to all covenants, agreements, and obligations of this agreement.

7.4.2 Neither OWNER nor ENGINEER shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, moneys that may become due or moneys that are due) this agreement without the written consent of the other, except as stated in paragraph 7.4.1 and except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this agreement. Nothing contained in this paragraph shall prevent ENGINEER from employing such independent consultants, associates, and

subcontractors as he may deem appropriate to assist him in the performance of services hereunder.

7.4.3 Nothing herein shall be construed to give any rights or benefits hereunder to anyone other than OWNER and ENGINEER.

7.5 Insurance

ENGINEER shall, as part of this agreement, maintain professional liability insurance covering errors and omissions, with a liability limit of $2,000,000.

SECTION 8 - SPECIAL PROVISIONS, EXHIBITS AND SCHEDULES

8.1 The following exhibit is attached to and made a part of this agreement: Exhibit A "Rate Schedule".

8.2 This agreement (consisting of pages 1 to 10 inclusive), including the exhibit identified above, constitute the entire agreement between OWNER and ENGINEER and supersede all prior written or oral understandings. This agreement and said exhibits may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

8.3 All services subcontracted during the performance of this contract shall follow the Six Affirmative Steps during selection of the subcontractor to ensure that minority business enterprises (MBE) and woman business enterprises (WBE) have an opportunity to compete for contracting opportunities.

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SIGNATURE BLOCK BELOW

The parties hereto have made and executed this agreement as of the day and year first above written.

OWNER:
CITY OF NEVADA

_____
(Authorized Signature)

_____
(Printed Name)

_____
(Title)

ENGINEER:
ALLGEIER, MARTIN & ASSOCIATES, INC.

_____
(Authorized Signature)

Chris Erisman, P.E.

Vice President

*This agreement is modeled after the standard form of agreement prepared and published by the National Society of Professional Engineers, the American Consulting Engineers Council, and the American Society of Civil Engineers.

EXHIBIT A
"RATE SCHEDULE"

LABOR RATES

Classification	Hourly Billing Rate 01/01/2018 Thru 12/31/2018
Principal/Engineer IV	$195
Principal/Engineer III	$180
Project Manager/Engineer II	$160
Project Manager/Engineer I	$145
Technician III/GIS Specialist	$132
Technician III	$112
Technician II	$100
Technician I	$94
Two-Man GPS Survey Crew	$185
One-Man GPS Survey Crew	$145
Three-Man Survey Crew	$201
Two-Man Survey Crew	$160
Registered Land Surveyor II	$170
Registered Land Surveyor I	$150
Survey Crew Member	$76
Right of Way Specialist	$116
Project Representative III	$112
Project Representative II	$100
Project Representative I	$92
Secretary/Assistant	$76
Print Specialist	$76

Note: All pre-approved overtime hours shall be invoiced at 1½ times the hourly billing rate shown above.

NON-LABOR RATES

Item	Rate
Travel	$0.54 per mile (or current IRS rate)
Subsistence	Actual Cost
Lodging	Actual cost
Special Postage or Shipping	Actual cost
Printing	Actual cost
Surveying Materials	Actual cost
Flow Meter Installation	$475/each
Flow Monitoring (minimum 4 meters)	$70/meter-day
Rain Gauge Monitoring	$15/gauge-day

Subcontract Specialty Services **Actual Cost + 10%**