

ENGINEERING SERVICES AGREEMENT
FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS

Updated March 2007

THIS AGREEMENT is made in Douglas County, Kansas, by and between the City of Lawrence, Kansas, hereinafter called the City, and BG Consultants, Inc. hereinafter called the Consultant. The City intends to construct an improvement project (hereinafter called the Project) in Lawrence, Kansas, described in Exhibit A.

The City hereby contracts with the Consultant for professional engineering services in connection with the Project, for such engineering services more particularly described herein in consideration of the mutual covenants herein set forth. By executing this Agreement, the Consultant represents to the City that the Consultant is professionally qualified to provide such and is licensed to practice engineering by all public entities having jurisdiction over the Consultant and the Project.

SECTION I - DEFINITIONS

As used in this Agreement, the following terms shall have the meanings ascribed herein unless otherwise stated or reasonably required by this contract, and other forms of any defined words shall have a meaning parallel thereto.

“Additional Services” means any services requested by the City which are not covered by Exhibit A of this Agreement.

“Agreement” means this contract and includes change orders issued in writing.

“City” means the City of Lawrence, Kansas.

“City Engineer” means the person employed by the City with the title of City Engineer who is licensed to practice engineering in the State of Kansas.

“Consultant” means the company or individual identified on page 1. Consultant shall employ for the services rendered, engineers, architects, landscape architects, and surveyors licensed, as applicable, by the Kansas State Board of Technical Professions.

“Contract Documents” means those documents so identified in the Contract for Construction of this Project, including Engineering Documents. All terms defined in said General Conditions shall have the same meaning when used in this Agreement unless otherwise specifically stated or in the case of a conflict in which case the definition used in this Agreement shall prevail in the interpretation of this Agreement.

“Engineering Documents” means all plans, specifications, reports, drawings, tracings, designs, calculations, computer models, sketches, notes, memorandums or correspondence related to the work described in Exhibit A attached hereto.

“Engineering Services” means the professional services, labor, materials, supplies, testing and other acts or duties required of Consultant under this Agreement together with Additional Services as City may request and evidenced by a supplemental agreement pursuant to the terms of this Agreement.

“Project” is as described in Exhibit A.

“Subsurface Borings and Testing” means borings, probings and subsurface explorations, laboratory tests and inspections of samples, materials and equipment; and appropriate professional interpretations of all the foregoing.

SECTION II - PAYMENT

A. COMPENSATION.

1. Maximum Total Fee and Expense: The City agrees to pay the Consultant a fee based on the actual hours expended on the Project at the rates indicated in the attached Fee Schedule; Exhibit B and the actual reimbursable expenses permitted under this Agreement and incurred on this Project, but not to exceed a maximum fee of \$190,426.50. This fee is based on the scope of services outlined in Exhibit A of this Agreement and shall be completed on or before May 31, 2017. Payment to Consultant shall not exceed the amounts in each phase as detailed in Exhibit B. Other methods of compensation are allowed only after written approval by the City Engineer.
2. Hourly Rate: Any Additional Services which are not set forth in this Agreement will be charged on the basis of the hourly rate schedule attached hereto as Exhibit B and reimbursable expenses not contemplated in this Agreement will be charged at actual cost. No Additional Services or costs shall be incurred without proper written authorization of the City.
3. Reimbursable Expenses: Reimbursable expenses shall be included in the total maximum fee. Reimbursable expenses include expenses of transportation in connection with the Project; expenses in connection with authorized out-of-

town travel; long-distance communications; expenses of printing and reproductions, postage and facsimile transmissions; expenses of renderings and models requested by the City and other costs as authorized by the City. Reimbursable expenses will not include overhead costs or additional insurance premiums. Unit rates for reimbursable expenses shall be included in Exhibit B attached.

4. Sales Tax: Compensation as provided for herein is exclusive of any sales, use or similar tax imposed by taxing jurisdictions on the amount of compensation, fees or services. Should such taxes be imposed, the City shall reimburse the Consultant in addition to the contractual amounts provided. The City shall provide tax exempt number if required, and if requested by the Consultant.

5. Billing: Consultant shall bill the City monthly for all services and reimbursable expenses. It is understood by the Consultant that monthly pay requests must be received by the 5th day of the month. The bill submitted by Consultant shall itemize the services and reimbursable expenses for which payment is requested, notwithstanding any claim for interest or penalty claimed in a Consultant's invoice. The City agrees to pay the Consultant within ten (10) days of approval by the governing body. If the Consultant fails to submit an itemized bill for services and/or reimbursable expenses within sixty (60) days of completion of the services, the City shall have no duty to pay the Consultant for those services.

6. City's Right to Withhold Payment: In the event the City becomes credibly informed that any representations of the Consultant provided in its monthly billing are wholly or partially inaccurate, the City may withhold payment of disputed sums then, or in the future, otherwise due to the Consultant until the inaccuracy and the cause thereof is corrected to the City's reasonable satisfaction. In the event the City questions some element of an invoice, that fact shall be made known to the Consultant immediately. The Consultant will help effect resolution and transmit a revised invoice if necessary. The City shall pay the undisputed portion of any invoice as provided in Part 5 of this Section II.
7. Progress Reports: A written progress report, as set out in Exhibit C, must be submitted with each monthly pay request indicating which specific design tasks and their percentage have been completed to date, and tasks that will be performed the following month. This report will serve as support for payment to the Consultant.
8. Timing of Services: Consultant will perform the services in a timely manner; however, if during their performance, for reasons beyond the control of the Consultant, protracted delays occur, the parties agree that they will negotiate in writing an equitable adjustment of time and compensation, taking into consideration the impact of such delays.
9. Change in Scope: For substantial modifications in authorized Project scope, and/or substantial modifications of drawings and/or specifications previously accepted by the City, when requested by the City and through no fault of the

Consultant, the Consultant shall be compensated for time and expense required to incorporate such modifications at Consultant's standard hourly rates per Exhibit B. Provided, however, that any increase in contract price or contract time must be requested by the Consultant and must be approved through a written supplemental agreement prior to performing such services. Consultant shall correct or revise any errors or deficiencies in its designs, drawings or specifications without additional compensation when due to Consultant's negligence, error, or omission.

10. Additional Services: The Consultant shall provide, with the City's concurrence, services in addition to those listed in Exhibit A, when such services are requested, in writing, by the City. Prior to entering into any Additional Services, the Consultant must submit a proposal outlining the Additional Services to be provided, estimation of total hours and a maximum fee based upon the hourly fee schedule attached hereto as Exhibit B. Payment to the Consultant, as compensation for these Additional Services, shall be in accordance with the attached hourly rate schedule attached as Exhibit B. Reimbursable expenses incurred in conjunction with Additional Services shall be paid separately and those reimbursable expenses shall be paid at actual cost. Records of reimbursable expenses and expenses pertaining to Additional Services and services performed on an hourly basis shall be made available to the City if so requested in writing. Production of these documents shall be made at the Consultant's office during normal business hours within a reasonable time at a date and time mutually convenient to both parties.

11. Supplemental Agreement: This Agreement may be amended to provide for additions, deletions and revisions in the services or to modify the terms and conditions thereof by written amendment signed by both parties. The contract price and contract time may only be changed by a written supplemental agreement approved by the City, unless it is the result of an emergency situation in which case the City Engineer may give verbal and facsimile approval to be followed by a written and approved supplemental agreement. If notice of any change affecting the general scope of the services or provisions of this Agreement, including but not limited to, contract price or time, is a requirement of any insurance policy held by the Consultant as a requirement of this Agreement, the giving of such notice shall be the Consultant's responsibility.

SECTION III - RESPONSIBILITIES OF CONSULTANT

A. SCOPE OF SERVICES: The Consultant shall furnish and perform the various professional duties and services in all phases of the Project to which this Agreement applies, as specifically provided in Exhibit A and which are required for the completion of the Project

B. GENERAL DUTIES AND RESPONSIBILITIES

1. Personnel: The Consultant shall assign only qualified personnel to perform any service concerning the Project. At the time of execution of this Agreement, the parties anticipate that the following individual will perform as the principal on this Project, Jason Hoskinson, PE, PTOE. As principal on

this Project, this person shall be the primary contact with the City Engineer, or another person so designated, and shall have authority to bind the Consultant. So long as the individual named above remains actively employed or retained by the Consultant, he/she shall perform the function of principal on this Project.

2. Independent Contractor: The Consultant is an independent contractor and as such is not an employee of the City.
3. Special Services: The Consultant may be called on to serve as a Consultant or witness in any litigation, arbitration, legal or administrative proceeding arising out of this Project. The Consultant shall not be paid extra by the City if the appearance is to defend Consultant's professional Engineering Services. If the Consultant is requested in writing by the City to appear as a witness, the Consultant will be paid its hourly fee as reflected on the hourly rate schedule attached hereto as Exhibit B.
4. Subsurface Borings and Material Testing: If tests additional to those provided in Exhibit A are requested by the City for design, the Consultant shall prepare specifications for the taking of the additional borings. Such Subsurface Borings and Testing, as defined herein, shall be provided by the Consultant through other contractors. Payment to the Consultant will be negotiated in writing.
5. Service by and Payment to Others: Any work authorized in writing by the City and performed by a third party other than the Consultant, or their subconsultants in connection with the proposed Project, shall be contracted

for and paid for by the City directly to the third party or parties. Fees for extra work shall be subject to negotiation between the City and the third party. Fees shall be approved by the City prior to the execution of any extra work. Although the Consultant may assist the City in procuring such services of third parties, the Consultant shall in no way be liable to either the City or such third parties in any manner whatsoever for such services or for payment thereof.

6. Subcontracting of Service: The Consultant shall not subcontract or assign any of the architectural, engineering or consulting services to be performed under this Agreement without first obtaining the written approval of the City regarding the services to be subcontracted or assigned and the firm or person proposed to perform the services. Neither the City nor the Consultant shall assign any rights or duties under this Agreement without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement.

7. Endorsement: The Consultant shall sign and seal all final plans, specifications, estimates and engineering data furnished by the Consultant. The Consultant warrants to the best of its knowledge, information and belief that its performance will be done in a professional manner. Any review or approval by the City of any documents prepared by the Consultant, including but not limited to the plans and specifications, shall be solely for the purpose of determining whether such documents are consistent with the City's

construction program and intent. No review of such documents shall relieve the Consultant of their responsibility for the accuracy. It is the Consultant's responsibility to verify the existence of any and all rights-of-way and easements, including temporary construction easements, that are necessary for the Project. Rights-of-way and easements shown on the plans shall have proper legal verification to prove their existence.

8. Professional Responsibility: The Consultant will exercise reasonable skill, care and diligence in the performance of its services as is ordinarily possessed and exercised by a licensed professional performing the same services under similar circumstances.
9. Inspection of Documents: The Consultant shall maintain all Project records for inspection by the City during the contract period and for three (3) years from the date of final payment.

SECTION IV - CITY OF LAWRENCE RESPONSIBILITIES

A. GENERAL DUTIES AND RESPONSIBILITIES

1. Communication: The City shall provide to the Consultant information and criteria regarding the City's requirement for the Project; examine and timely respond to the Consultant's submissions; and give notice to the Consultant, who shall respond promptly, whenever the City observes or otherwise becomes aware of any defect in the services.

2. Access: The City will provide access agreements for the Consultant to enter public and private property when necessary.
3. Duties: The City shall furnish and perform the various duties and services in all phases of the Project which are outlined and designated in Exhibit A as the City's responsibility.
4. Program and Budget: The City shall provide full information stating the City's objectives, schedule, budget with reasonable contingencies, and necessary design criteria.
5. Other consultants: The City may contract with "specialty" consultants when such services are requested by the Consultant.
6. Testing: Any tests required to supplement the scope of services or tests required by law shall be furnished by the City.
7. Legal, Insurance, Audit: The City shall furnish all legal, accounting and insurance counseling services as may be necessary at any time for the Project. The City shall furnish all bond forms required for the Project.
8. Project Representative: The City Engineer, or the City Engineer's designee, shall represent the City in coordinating this Project with the Consultant, with authority to transmit instructions and define policies and decisions of the City.

SECTION V - GENERAL PROVISIONS

A. TERMINATION

1. Notice: The City reserves the right to terminate this Agreement for either cause or for its convenience and without cause or default on the part of the Consultant, by providing written notice of such termination to the Consultant. Upon receipt of such notice from City, the Consultant shall, at City's option as contained in the notice: Immediately cease all services and meet with City to determine what services shall be required of the Consultant in order to bring the Project to a reasonable termination in accordance with the request of the City. The Consultant shall also provide to the City digital and mylar copies of all drawings and documents completed or partially completed at the date of termination. The Consultant is entitled to terminate this agreement by providing thirty (30) days written notice.
2. Compensation for Convenience Termination: If City shall terminate for its convenience, as herein provided, City shall compensate Consultant for all services completed to date prior to receipt of the termination notice. Compensation shall not include anticipatory profit or consequential damages, neither of which will be allowed.
3. Compensation for Default Termination: If the City shall terminate for cause or default on the part of the Consultant, the City shall compensate the Consultant for the reasonable cost of services completed to date of its receipt of the termination notice. Compensation shall not include anticipatory profit or consequential damages, neither of which will be allowed. The City also retains all its rights and remedies against the Consultant including but not limited to its rights to sue for damages, interest and attorney fees.

4. Incomplete Documents: Neither the Consultant, nor its subconsultant, shall be responsible for errors or omissions in documents which are incomplete as a result of an early termination under this section, the Consultant having been deprived of the opportunity to complete such documents and certify them as ready for construction.

B. DISPUTE RESOLUTION

City and the Consultant agree that disputes relative to the Project should first be addressed by negotiations between the parties. If direct negotiations fail to resolve the dispute, the party initiating the claim that is the basis for the dispute shall be free to take such steps as it deems necessary to protect its interests provided, however, that notwithstanding any such dispute the Consultant shall proceed with the services as per this Agreement as if no dispute existed.

C. OWNERSHIP OF ENGINEERING DOCUMENTS

All Engineering Documents prepared in connection with this Project shall be the property of the Consultant, whether the Project for which they are made is executed or not; however, the Consultant shall provide the City a copy of all Engineering Documents as requested by the City and related to services for which the consultant has been compensated.

Reports, plans, specifications and related documents are the Consultant's copyrighted instruments, and the Consultant, at its option, may so identify them by appropriate markings. Provided that the Consultant is paid in full for its services, then the City may reuse these final documents without any additional compensation.

However, such reuse shall be for City use and the Consultant shall have no liability for City alteration to the documents or for any use other than as intended pursuant to the terms hereof.

D. INSURANCE

Unless otherwise specified, the City shall be shown as an additional insured on all applicable insurance policies except professional liability and worker's compensation. All general and automobile liability insurance shall be written on an occurrence basis unless otherwise agreed to in writing by the City. The City shall be given written thirty (30) days notice of any insurance policy cancellation.

1. Professional Liability: The Consultant shall maintain, throughout the duration of this Agreement, Professional Liability Insurance in an amount not less than one million dollars (\$1,000,000), per claim and annual aggregate, and shall provide the City with certification attached to this Agreement.

2. Commercial General Liability

Each Occurrence \$500,000

General Aggregate \$500,000

The policy must also include personal injury; products/completed operations; contractual liability and independent contractors.

3. Worker's Compensation: The Consultant shall retain Worker's Compensation Insurance in the statutory amounts.

4. Employer's Liability:

Bodily Injury by Accident \$100,000 (each accident)

Bodily Injury by Disease \$500,000 (policy limit)

Bodily Injury by Disease \$100,000 (each employee)

5. Automobile Insurance: The Consultant shall maintain a policy in the minimum amounts as required for general liability to protect against claims for bodily injury and/or property damage arising out of the ownership or use of any owned, hired and/or non-owned vehicle.

6. Industry Ratings: City will only accept coverage from an insurance carrier which offers proof that it:

- a) Is licensed to do business in the State of Kansas;
- b) Carries a Best's Policyholder rating of A or better; and
- c) Carries at least a Class X financial rating; or is a company mutually agreed upon by the City and Consultant.

7. Subconsultant's Insurance: If a part of this Agreement is to be sublet, the Consultant shall either:

- a) Cover all subconsultants in its insurance policies; or
- b) Require each subconsultant not so covered to secure insurance which will protect against all applicable hazards or risks of loss in the amount so designated.

Whichever option is chosen, the Consultant shall indemnify and hold harmless the City as to any and all damages, claims, or losses, including

attorney's fees, arising out of the negligent acts or omissions of its subconsultants.

E. INDEMNITY

1. Indemnify and Hold Harmless: For purposes of this Agreement, the Consultant hereby agrees to indemnify and hold harmless the City and its employees and officials from any and all loss to the extent caused or incurred in whole or in part as a result of the negligence or wrongful acts of the Consultant, its officers, subsidiaries, employees and subconsultants/assignees and their respective officers and employees, in the performance of services pursuant to this Agreement.

In the case of any claims against the City or its employees and officials indemnified under this Agreement, by an employee of the Consultant, its officers, subsidiaries, or subconsultant/assignees, the indemnification obligation contained in this Agreement shall be limited to those losses caused by the negligence of the Consultant but shall not be limited by any limitation on amount or type of damages, compensation or benefits payable by or for the Consultant, its officers, subsidiaries, or subconsultant/assignees, under workers' compensation acts, disability benefit acts, or other employee benefit acts, as allowed by law. The Consultant's obligation hereunder shall not include amounts attributable to the fault or negligence of the City or any third party for whom the Consultant is not responsible.

F. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties and supersedes all prior agreements, whether oral or written, covering the same subject matter. This Agreement may not be modified or amended except in writing mutually agreed to and accepted by both parties to this Agreement.

G. APPLICABLE LAW

This Agreement is entered into under and pursuant to, and is to be construed and enforceable in accordance with, the laws of the State of Kansas.

H. ASSIGNMENT OF AGREEMENT

This Agreement shall not be assigned or transferred by either the Consultant or the City without the written consent of the other.

I. NO THIRD PARTY BENEFICIARIES

Nothing contained herein shall create a contractual relationship with, or any rights in favor of, any third party.

J. FEDERAL LOBBYING ACTIVITIES (Only applies to projects receiving federal funds via the City): N/A

K. COVENANT AGAINST CONTINGENT FEES

The Consultant warrants that they have not employed or retained any company or person, other than a bona fide employee working for the Consultant, to solicit or secure this Agreement, and that they have not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage

fee, gifts, or any other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City may terminate this Agreement without liability or may, in its discretion, deduct from the contract price or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

L. COMPLIANCE WITH LAWS

Consultant shall abide by all applicable federal, state and local laws, ordinances and regulations applicable to this Project until the Engineering Services required by this Agreement are complete. Consultant shall secure all occupational and professional licenses, permits, etc., from public and private sources necessary for the fulfillment of its obligations under this Agreement.

M. TITLES, SUBHEADS AND CAPITALIZATION

Title and subheadings as used herein are provided only as a matter of convenience and shall have no legal bearing on the interpretation of any provision of the Agreement. Some terms are capitalized throughout the Agreement but the use of or failure to use capitals shall have no legal bearing on the interpretation of such terms.

N. SEVERABILITY CLAUSE

Should any provision of this Agreement be determined to be void, invalid unenforceable or illegal for whatever reason, such provisions shall be null and void; provided, however, that the remaining provisions of this Agreement shall be unaffected thereby and shall continue to be valid and enforceable.

O. HAZARDOUS MATERIALS

The Consultant and the Consultant's subconsultants shall have no responsibility for the discovery, presence, handling, removal, or disposal or exposure of persons to hazardous materials in any form at the Project site.


P. AFFIRMATIVE ACTION

The Consultant agrees to comply with the provisions of K.S.A. 44-1030, in the Kansas Acts Against Discrimination, and Section 10-113 eq seq of the Code of the City of Lawrence, Kansas, Affirmative Action in Public Contracts.

Q. EXECUTION OF CONTRACT

The parties hereto have caused this Agreement to be executed in duplicate this _____ day of _____, 2016.

CONSULTANT

By:  _____
Jason Hoskinson, PE, PTOE
Vice President

CITY OF LAWRENCE, KANSAS

By: _____
Thomas M. Markus
City Manager

APPROVED AS TO FORM:

Toni R. Wheeler
City Attorney

EXHIBIT A

SCOPE OF SERVICES

I. PROJECT LOCATION AND DESCRIPTION

1. Provide professional services described as follows:

Queens Road Improvements, 6th Street to North City Limits

City Project #PW1528

2. Consultant will provide professional services
 - a. Design survey of the Queens Road right-of-way from the south right-of-way line of 6th Street to Eisenhower Road.
 - b. Design traffic signal and sidewalk improvements at 6th and Queens Road.
 - c. Investigate concept geometric improvements at 6th and Queens Road.
 - d. Design Queens Road north of 6th Street as a Collector Street with bicycle lanes, one sidewalk and one shared use path.
 - e. Design an 8 inch diameter waterline from 6th Street to the North City Limits.
 - f. Traffic signal and intersection improvements at 6th and Queens Road will be tabulated separately in the construction documents to be included in a benefit district separate from the benefit district for Queens Road Improvements north of 6th Street.

II. PRELIMINARY DESIGN PHASE (Field Check)

1. Meet with city staff to determine specific Project needs and general Project desires. Also, review and receive available information and plans. Project budget will be provided by city staff.
- ~~2. Conduct one public meeting to discuss the proposed improvements and to receive input and hear concerns from the neighborhood.~~
3. Perform design survey as required to prepare plan and profile sheets. All surveys of the Project must tie to two different section corners. The survey must have a linear closure of 1:15,000 as determined by the American Congress on Surveying and Mapping. All survey data must be provided to the City in digital format.
4. Obtain information from utility companies who have facilities within the Project limits. Utility companies shall be required to locate their facilities within the Project limits. Include utility locations in survey data. Provide preliminary utility coordination. Line and depth are required for all underground utilities.

5. Obtain ownership and easement (O & E) certificates on the properties that abut the Project site. Copies of all ownership maps and recorded plats will be obtained from the Douglas County courthouse.
6. Provide traffic engineering analysis, if needed, to determine design traffic volumes, vehicle classifications, accident experience, speed data, and recommended signal timing and phasing. Determine and lay out the lane configurations and geometrics that would be required to serve the design traffic volumes along the route.
- ~~7. Provide services of a soil Consultant to determine the adequacy of subgrade and pavement condition. Complete a pavement evaluation and a determination of pavement improvement needs. Make recommendations, in writing, on pavement cross section for the Project. Solicit geotechnical engineering firms to provide proposals for geology investigations and to provide earthwork, subgrade and pavement recommendations for the Project. Consultant will receive and deliver the proposals to the Client. Client will contract directly with a geotechnical engineering firm.~~
8. Review alternative design concepts with the City prior to progressing to the detail aspects of the Project. Alternative concepts shall be discussed to determine the best horizontal and vertical alignments for the Project. City's concurrence in the selection of an alternate or preliminary concept will be contingent on the accuracy and completeness of the background information provided by the Consultant.
9. Design storm drainage systems in accordance with the current City Stormwater Management Criteria. Prepare a hydrologic and hydraulic analysis to establish recommendations concerning storm drainage design criteria. Include pipe/box sizes, alignments, grades, drainage easements, and associated Project design items. Perform watershed analysis and computer flow modeling using either HEC-1, TR-20, SWMM, FIEC-2, or FIY-7. Provide a written report of the results of this analysis and copies of the computer digital data.
- ~~10. Prepare a map showing the limits of the drainage basin for all sanitary sewer design. All sanitary sewer extensions shall conform to the wastewater collection system master plan. Include a complete analysis of all pump stations, including a map showing the property sewered by this pump station. Provide a written report detailing conformance with the master plan, assumptions that were made, and the flows from each property to the pump station.~~
11. Prepare preliminary estimate of probable construction cost for the Project.
12. Prepare three sets of preliminary plan and profile sheets in sufficient detail for the City to review. Allow two weeks for the City to review preliminary plans. These documents shall include preliminary right-of-way, necessary easement

acquisitions, drainage area map, and drainage design data. If Project is over budget, a determination of alternates is required. Contract may be terminated if additional funds are not available or Project modifications cannot be made.

13. The following will be needed to develop the preliminary design:

- a) Prepare the base drawing with a plan portion showing existing topography and contours and the profile to show grades. The base drawings shall be later used as full scale base drawings for right-of way and/or final design plans.
- b) The preliminary design plans shall be prepared in accordance with the latest editions of the City of Lawrence Design Criteria for infrastructure improvements, A Policy on Geometric Design of Highways and Streets prepared by the American Association of State Highway and Transportation Officials (AASHTO), and the Manual on Uniform Traffic Control Devices prepared by the Federal Highway Administration (FHWA).
- c) The plan view scale shall be 1 inch = 30 feet and extend at least 300 feet beyond the Project limits.
- d) The profile view scale shall be 1 inch = 30 feet horizontal, and 1 inch = 5 feet vertical.
- e) The preliminary design plans shall include the tentative additional easement and right-of-way limits, property lines and ownerships, section lines, township and ranges, any U.S. Surveys, city limits, and a general outline of the construction staging, and other critical design items.
- f) Traffic assignments shall be shown on the respective roadways or on a line sketch of the roadways.

14. Upon approval of the preliminary design plans, the Consultant shall arrange a field check with the City to discuss design features in the Project area.

15. The Consultant shall be responsible for verification, furnishing, and recording of any legal land corners necessary for legal descriptions used in deed writing. The Consultant's personnel shall tie the approved corner into the center line.

III. FINAL DESIGN PHASE (Office Check)

1. Meet with city staff to review comments on preliminary design phase.
2. Attend one Lawrence City Commission meeting to provide Client with a presentation of the project scope and estimated cost.

3. Conduct one public meeting to discuss the proposed improvements and their impacts on the adjacent properties with neighborhood.
4. Attend up to three (3) meetings with residential property owners affected by the project to discuss project impacts and concerns.
5. Prepare a right-of-way strip map and furnish the City with the original and one print of the strip map. Also, furnish the City with 8 1/2" x 11" plats and legal descriptions of each property required for right-of-way or easement acquisition. ~~The Consultant agrees to complete these right of way or easement descriptions and drawings by _____.~~ The Consultant shall be responsible for making revisions to the right of way and construction plans resulting from negotiations with the property owners.
6. Prepare all applications, exhibits, drawings, and specifications necessary to obtain all required permits. Applications should be prepared for the City's execution and submittal. Assist the City in obtaining permit approvals by furnishing additional information about the Project design. Provide, in the specifications, a list of the permits which must be obtained by the construction contractor.
7. The Consultant shall be responsible for preparing the required applications and obtaining approved permits for the National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities, U.S. Army Corps of Engineers 404 Permit, and/or the Kansas Department of Agriculture, Division of Water Resources permits.
8. Prepare final construction documents for improvements, incorporating all comments from the city staff. Submit final plans to the City for final review. Allow two weeks for City review.
9. The design plans shall include a detailed traffic control plan with an outline for construction staging conforming to the requirements of the Manual on Uniform Traffic Control Devices and the Policy. Procedure and Design Manual The traffic control plan requires submittal to the City for review and approval prior to inclusion in the final design plans.
10. Prepare detailed stormwater pollution prevention plans (SWP3) as required by City Code for inclusion in the final construction plans.
11. The Consultant shall prepare computations for all design plan quantities and bid items.
12. The consultant shall design and detail all structures or improvements not covered by standard detail sheets.

13. As a minimum, the final design plans shall include the following:

- a) Title Sheet
- b) Typical Sections
- c) Plan Sheets
- d) Profile Sheets
- e) Intersection Detail Sheets, including curb return profiles
- f) Traffic Control Plan Sheets
- g) Stormwater Pollution Prevention Plan
- h) Drainage Area Map,
- i) Hydrologic and hydraulic data for drainage systems
- j) Permanent Signing Quantity Sheets
- k) City Standard Detail Sheets
- l) Earthwork Quantities, Cross Sections and Entrance Sections with existing and proposed grades
- m) Miscellaneous Detail Sheets, non-standard details
- n) Summary of Quantities listed as bid items.

Additional plans and information may be required to complete the Final Plans.

14. Provide all utility companies a set of final plans for their use. Meet with each utility company to discuss the relocation of their facilities and the time schedule.

15. Provide estimate of probable construction cost based upon the final plans.

16. AutoCad Plot Files, AutoCad .dwf files, .tif files, or .pdf files are to be supplied in lieu of original mylars. Two (2) hard copies of the final plans, printed on 24" x 36" bond paper, shall also be delivered to the City.

IV. BIDDING PHASE

1. Answer all questions from contractors regarding the final plans. Issue addenda, if necessary, prior to the bid letting.
2. Conduct a prebid conference, if required by city staff.
3. Provide Client with an Engineer's Estimate for the bid letting.
4. Review bids and provide Client with a letter of recommendation regarding award of the construction contract.

V. CONSTRUCTION PHASE

1. Construction Phase services, if requested by the City, will be provided by a separate agreement.
2. ~~Answer all questions from the contractor regarding the design and interpretation of the plans.~~
3. ~~Review and comment, or approve, contractor's shop drawings and samples and the results of tests and inspections and other data which each contractor is required to submit for the purposes of checking for compliance with the design concept and conformance with the requirements of the contract documents.~~
4. ~~Provide the City a complete set of as built drawings for the Project. The as built drawings shall be provided as a digital copy, as detailed in Exhibit D, and one set of mylars.~~
5. ~~On a sanitary sewer Project, all manholes shall be located by GPS methods, and this coordinate location shall be provided to the City with the as built plans.~~
6. A separate agreement for construction inspection will be executed at a later date if desired.

GENERAL

1. Provide schedule for completion of preliminary plans, right-of-way plans, final plans, and bid date.
2. Provide written monthly progress reports as detailed in Exhibit C.
3. If no bid is received less than the engineer's estimate plus 20%, the plans will be modified in an attempt to reduce the cost of the Project at no additional cost to the City. The Project may be abandoned at the City's option; in no case will the Consultant be required to modify plans more than once without additional compensation.
4. Consultant must notify the City of additional costs for service requested prior to performing the service. For example, if Consultant is asked to attend a meeting not included in the scope of service, the cost must be determined before attending.
5. Written notes from any meetings with state, federal, or other agencies will be provided to the City by the Consultant. These need not be "formal minutes" but notes on discussion topics and requirements imposed.
6. All documents must be provided in the current version of Microsoft Word, as designated by the City at the time of execution of this contract.

7. All drawings must be prepared on standard 24" x 36" mylar sheets. Also final plans, field notes, and other pertinent Project mapping records are to be provided to the City on digital format, as detailed in Exhibit D.

EXHIBIT B

**FEE SCHEDULE PART 1 OF 2
6th and Queens Intersection Improvements**

A. PROFESSIONAL SERVICES													
A.1. Meetings and Project Management													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
One Concept Design Review Meeting		1				1							2
Preliminary Plans Review Meeting		1				1							2
Advisory Committee Meetings (2 each)													0
Property Owner Meetings													0
One Public Meeting													0
City Commission Meeting													0
Solicit Geotech Proposals													0
Project Management (Billings, etc.)		2											2
Total Hours =	0	4	0	0	0	2	0	0	0	0	0	0	6
Total Cost =	\$ -	\$ 684.00	\$ -	\$ -	\$ -	\$ 220.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 904.00
A.2. Survey													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Project Survey Control													0
Topographic Survey									8	8			16
Research & R/W Determination											4		0
Prepare Base Map													4
Total Hours =	0	0	0	0	0	0	0	0	8	8	4	0	20
Total Cost =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 816.00	\$ 592.00	\$ 428.00	\$ -	\$ 1,836.00
A.3. Preliminary Design													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Concept Design Options						2							2
Geometric Design, Prepare Base File, etc.						2							2
Traffic Engineering Analysis													0
Pavement Sections and Details													0
Street/Sidewalk Plan and Profile Sheets						4							4
Intersection Details		1				2							3
Roundabout Design & Details													0
Misc. Sheets (Ret. Walls, Schedules, etc.)						2					4		6
Pavement Marking and Signing		1				2					4		7
Preliminary Traffic Control Plan													0
Traffic Signal Design						16							16
Cross Sections, Grading, Earthwork													0
Preliminary Cost Estimate						2							2
QC/QA, Assemble and Deliver Plans		1											1
Utility Coordination													0
Total Hours =	0	3	0	0	0	32	0	0	0	0	8	0	43
Total Cost =	\$ -	\$ 513.00	\$ -	\$ -	\$ -	\$ 3,520.00	\$ -	\$ -	\$ -	\$ -	\$ 856.00	\$ -	\$ 4,889.00
A.4. Final Design													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Geometric Design, Finalize Base File, etc.													0
Traffic Engineering Analysis													0
Pavement Sections and Details													0
Street/Sidewalk Plan and Profile Sheets													0
Intersection Details													0
Roundabout Design & Details													0
Misc. Sheets (Ret. Walls, Schedules, etc.)						1							1
Pavement Marking and Signing						1							1
Traffic Control and Project Phasing						8							8
Traffic Signal Design		1				4							5
Cross Sections, Grading, Earthwork													0
Preliminary Cost Estimate						0.5							0.5
QC/QA, Assemble and Deliver Plans		1											1
Utility Coordination													0
Permitting													0
Right-of-Way Descriptions													0
Total Hours =	0	2	0	0	0	14.5	0	0	0	0	0	0	16.5
Total Cost =	\$ -	\$ 342.00	\$ -	\$ -	\$ -	\$ 1,595.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,937.00
A.5. Bid Phase Services													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Address Contractor Questions						2							2
Pre-bid Conference													0
Engineer's Estimate						0.5							0.5
Attend Bid Letting		0.5											0.5
Review Bids & Provide Recommendation		0.5										1	1.5
Total Hours =	0	1	0	0	0	2.5	0	0	0	0	0	1	4.5
Total Cost =	\$ -	\$ 171.00	\$ -	\$ -	\$ -	\$ 275.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55.50	\$ 501.50

Subtotal A. Professional Services = \$ 10,067.50

B. REIMBURSABLE EXPENSES				
1. Ownership and Easement Certificates	0	each @	\$75.00	= \$0.00
2. Mileage	0	miles @	\$0.54	= \$0.00
3. Subconsultant - Lawrence Landscape	0	Lump Sum	\$0.00	= \$0.00

Subtotal B. Reimbursable Expenses = \$0.00

TOTAL ESTIMATED ENGINEERING FEE (Subtotal A + Subtotal B) = \$ 10,067.50

EXHIBIT B

FEE SCHEDULE PART 2 OF 2
Queens Road Benefit District Improvements (North of 6th Street)

A. PROFESSIONAL SERVICES													
A.1. Meetings and Project Management													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$ 121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
One Concept Design Review Meeting		1				1							2
Preliminary Plans Review Meeting		1				1							2
Advisory Committee Meetings (2 each)		8											8
Property Owner Meetings (3 each)		8				8							16
One Public Meeting	2	2				4				8			16
City Commission Meeting		2											2
Solicit Geotech Proposals						2							2
Project Management (Billings, etc.)		6											6
Total Hours =	2	28	0	0	0	16	0	0	0	0	8	0	54
Total Cost =	\$ 388.00	\$ 4,788.00	\$ -	\$ -	\$ -	\$ 1,760.00	\$ -	\$ -	\$ -	\$ -	\$ 856.00	\$ -	\$ 7,792.00
A.2. Survey													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$ 121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Project Survey Control								4	16	16			36
Topographic Survey		1					8		100	200			309
Research & R/W Determination							16	20					36
Prepare Base Map		1									12		13
Total Hours =	0	2	0	0	0	0	24	24	116	216	12	0	394
Total Cost =	\$ -	\$ 342.00	\$ -	\$ -	\$ -	\$ -	\$ 4,236.00	\$ 3,108.00	\$ 11,832.00	\$ 15,984.00	\$ 1,284.00	\$ -	\$ 36,786.00
A.3. Preliminary Design													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$ 121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Concept Design Options		40				80							120
Geometric Design, Prepare Base File, etc.		16				40							56
Traffic Engineering Analysis		16				16					8		32
Pavement Sections and Details		4				16							28
Street/Sidewalk Plan and Profile Sheets		2				32					40		74
Intersection Details		1				16					16		33
Roundabout Design & Details		8				40					24		72
Misc. Sheets (Ret. Walls, Schedules, etc.)		2				16					16		34
Pavement Marking and Signing		2				40					24		66
Preliminary Traffic Control Plan		2				8							10
Waterline Design		4				24					40		68
Cross Sections, Grading, Earthwork		2				24					8		34
Preliminary Cost Estimate		1				4							5
QC/QA, Assemble and Deliver Plans		8	8								2		18
Utility Coordination		8				24							32
Total Hours =	0	116	8	0	0	380	0	0	0	0	178	0	682
Total Cost =	\$ -	\$ 19,836.00	\$ 1,240.00	\$ -	\$ -	\$ 41,800.00	\$ -	\$ -	\$ -	\$ -	\$ 19,046.00	\$ -	\$ 81,922.00
A.4. Final Design													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$ 121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Geometric Design, Finalize Base File, etc.						40							40
Traffic Engineering Analysis		2				4						2	8
Pavement Sections and Details						4					2		6
Street/Sidewalk Plan and Profile Sheets		2				16					16		34
Intersection Details		1				4					2		7
Roundabout Design & Details		2				16					4		22
Misc. Sheets (Ret. Walls, Schedules, etc.)		4				40					40		84
Pavement Marking and Signing		1				40					16		57
Traffic Control and Project Phasing		4				16					8		28
Waterline Design		2				16					16		34
Cross Sections, Grading, Earthwork		2				16					4		22
Preliminary Cost Estimate		1				2							3
QC/QA, Assemble and Deliver Plans		8	8								2		18
Utility Coordination		4				16							20
Permitting		1				4							5
Right-of-Way Descriptions (up to 10)		1					8	16			12		37
Total Hours =	0	35	8	0	0	234	8	16	0	0	122	2	425
Total Cost =	\$ -	\$ 5,985.00	\$ 1,240.00	\$ -	\$ -	\$ 25,740.00	\$ 1,412.00	\$ 2,072.00	\$ -	\$ -	\$ 13,054.00	\$ 111.00	\$ 49,614.00
A.5. Bid Phase Services													
Task	Principal	PE IV	PE III	PE II	PE I	Design Eng.	Sen. Proj. Surv.	Proj. Surveyor	Field Supervisor	Surveyor	CAD Operator	Clerical	Total
Hourly Rate =	\$ 194.00	\$ 171.00	\$ 155.00	\$ 144.00	\$ 121.50	\$ 110.00	\$ 176.50	\$ 129.50	\$ 102.00	\$ 74.00	\$ 107.00	\$ 55.50	
Address Contractor Questions		2				4							6
Pre-bid Conference		1											1
Engineer's Estimate						2							2
Attend Bid Letting		0.5											0.5
Review Bids & Provide Recommendation		1										1	2
Total Hours =	0	4.5	0	0	0	6	0	0	0	0	0	1	11.5
Total Cost =	\$ -	\$ 769.50	\$ -	\$ -	\$ -	\$ 660.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55.50	\$ 1,485.00

Subtotal A. Professional Services = \$ 177,599.00

B. REIMBURSABLE EXPENSES				
1. Ownership and Easement Certificates	15	each @	\$75.00	= \$1,125.00
2. Mileage	250	miles @	\$0.54	= \$135.00
3. Subconsultant - Lawrence Landscape	1	Lump Sum	\$1,500.00	= \$1,500.00

Subtotal B. Reimbursable Expenses = \$2,760.00

TOTAL ESTIMATED ENGINEERING FEE (Subtotal A + Subtotal B) = \$ 180,359.00

EXHIBIT C

PROGRESS REPORTS

Progress reports shall include the following:

1. Status of design: List each principal task and the percent complete.
2. Status of right-of-way or easement descriptions: Describe the status of legal descriptions for property to be acquired for this project.
3. Tasks to be performed in the next month: List each principal task which is anticipated to be started or completed next month.
4. Issues which need direction from the City: List all items where further direction from the City is needed by the Consultant in order to complete the project within the time schedule detailed in this Agreement.
5. Issues which may present a problem for meeting the time schedule: List all issues or problems, regardless of who they involve; which may prevent a timely completion of the plans, or may create a problem during construction.

EXHIBIT D

CAD REQUIREMENTS

1. Project drawings shall be developed by the Consultant through the use of a Computer-Aided Drafting (CAD) System and made available to the City on digital media (see #3 below). However, due to the potential that the information set forth on the digital media can be modified by the City, or the City Consultant's, unintentionally or otherwise, the Consultant shall remove all indices of its ownership, professional corporation name, seal, and/or involvement from each digital display. For documentation purposes, two sets of an original digital media and two (11" x 17" size or larger) duplicate mylar sets will be prepared. One set will be given to the City and one set will be retained by the Consultant.
2. Software requirement: AutoCAD (Version 2006 preferred) DWG or DXF file format.
***NOTE: A LAYER LIST FOR EACH PROJECT SHALL ACCOMPANY THE DIGITAL MEDIA.**
3. Acceptable Digital Media: Compact Disk or DVD. *Note: Media will be returned to the Consultant.
4. Compression Utilities: If a compression utility is used, save file(s) as "self-extracting" file(s).
5. Ensure that all objects are on their proper layers.