The Procurement Division of Knox County, Tennessee will receive sealed bids for the provision of <u>Traffic Signal</u> <u>Maintenance and Service</u> as specified herein. Bids must be received by **2:00 p.m.** on January **30**, **2020**. Late bids will neither be considered nor returned.

#### Deliver Bids To:

#### Bid Number 2926 Knox County Procurement Division Suite 100 1000 North Central Street Knoxville, Tennessee 37917

#### The Bid Envelope must show the Bid Number, Bid Name & Bid Opening Date.

#### SECTION I GENERAL TERMS AND CONDITIONS

- 1.1 <u>ADDITIONAL INFORMATION:</u> Knox County wants requests for additional information routed to Ben Sharbel, CPPO, CPPB, Supervisor of Property Development and Asset Management, at 865.215.5765. Questions may be emailed to <u>ben.sharbel@knoxcounty.org</u>. Information about the Knox County Procurement Division may be obtained on the internet at <u>www.knoxcounty.org/procurement</u>.
- **1.2** <u>ACCEPTANCE:</u> Vendors shall hold their price firm and subject to acceptance by Knox County for a period of ninety (90) business days from the date of the bid opening, unless otherwise indicated in their bid.
- **1.3** <u>ALTERNATIVE BIDS:</u> Knox County will not accept alternate bids (those not equal to specifications) unless authorized by the Invitation for Bid.
- **1.4** <u>AUDIT HOTLINE:</u> Knox County has established an Audit Hotline to report potential fraud and waste. To report potential fraud, waste or abuse, please call 1-866-858-4443 (toll-free). You can also file a report online by accessing <a href="http://www.knoxcounty.org/hotline/index.php">http://www.knoxcounty.org/hotline/index.php</a>.

## Vendors are hereby cautioned that this Audit Hotline does not replace the Award Protest Procedures found in Section VI, Item M of the Knox County Procurement Regulations.

- **1.5** <u>AWARD:</u> Award will be made to the most responsive, responsible bidder(s) meeting specifications, who presents the product or service that is in the best interest of Knox County. Knox County reserves the right to award this bid on a schedule basis, item-by-item basis, an all or none basis, or by multiple award, whichever is in the best interest of the County. Knox County reserves the right to not award this bid. Award will be made in accordance with the evaluation criteria specified herein.
- **1.6 <u>BID DELIVERY:</u>** Knox County requires bidders, when hand delivering bids, to time and date stamp the envelope before depositing it in the bid box. The time clock in the Procurement Division shall become the official record of time. Electronic submissions are recorded electronically. Knox County shall not be responsible for technical difficulties experienced by vendors trying to register or submit their bid electronically less than twenty-four (24) hours prior to the bid opening time.

Solicitations must be in a <u>sealed</u> envelope/box prior to entering the Procurement Division office. Procurement Division personnel are not allowed to see the submittal nor assist in placing documents in an envelope/box. Additionally, the Procurement Division is not responsible for providing materials (e.g.: envelopes, boxes, tape) for submittals.

**1.7 <u>BUSINESS OUTREACH PROGRAM</u>: Knox County has established a Business Outreach Program, which has the responsibility of increasing opportunity for small, minority and women owned businesses. This is being accomplished through community education programs, policy edification, active recruitment of interested businesses and process re-engineering.** 

Knox County is committed to ensuring full and equitable participation for all disadvantaged businesses. Knox County welcomes submittals from those disadvantaged businesses that have an interest in providing goods and/or services listed herein.

In addition, Knox County strongly encourages the inclusion of disadvantaged businesses by non-disadvantaged contractors who may wish to partner or subcontract portions of this agreement in order to accomplish the successful delivery of goods and/or services. If you are a disadvantaged business and would like additional information about our Business Outreach Program please contact:

Diane Woods, Business Outreach Administrator Knox County Procurement Telephone: 865.215.5760 Fax: 865.215.5778 E-Mail: <u>diane.woods@knoxcounty.org</u>

- **1.8 <u>CONFLICT OF INTEREST</u>:** Vendors must have read and complied with the "Non-Conflict of Interest" statement provided in the vendor registration process prior to the opening of this solicitation.
- **1.9 <u>COOPERATIVE PROCUREMENT:</u>** Bidders must indicate whether it is permissible for other governments in Tennessee to purchase these items or services at the same price. Freight charges can be adjusted to reflect differences in delivery costs.
- **1.10 <u>COPIES</u>:** Knox County **requires** that bids being submitted by hand be submitted with one (1) marked original and two (2) exact copies.
- **1.11 DECLARATIVE STATEMENT:** Any statement or words (e.g.: must, shall, will) are declarative statements and the vendor must comply with the condition. Failure to comply with any such condition may result in their bid being non-responsive and disqualified.
- **1.12** <u>ELECTRONIC TRANSMISSION OF BIDS:</u> Knox County's Procurement Division <u>will not</u> accept electronically transmitted bids through the County's On-Line Procurement System. Facsimile submission is strictly prohibited.
- **1.13** HOW TO DO BUSINESS: Knox County utilizes a web-based procurement software system, "Knox Procurement On-Line." The system provides our clients (vendors, County departments and the citizens of Knox County) with a more enhanced and end-user friendly means of accessing our services. The system allows for on-line vendor registration and maintenance, electronic receipt of Purchase Orders, on-line retrieval and submittal of quotes, bids and proposals for our vendor-clients and on-line requisitioning and receiving for our county departments. In order for the County to maximize its investment and minimize the cost associated with office operations we need your help. When doing business with Knox County we are urging you to please go to our website at www.knoxcounty.org/procurement, register as a vendor in our on-line procurement system, "Knox Procurement On-Line," if you have not done so and whenever possible to conduct your business with the County through this site. If you have any questions please contact the Procurement Division Representative listed in subsection 1.1 of this document.
- **1.14 INCURRED COSTS:** Knox County will not be responsible for any costs incurred by the bidder in the preparation of their bid.
- **1.15 <u>MULTIPLE BIDS</u>: Knox County will consider multiple bids that meet specifications.</u>**
- **1.16 <u>NON-COLLUSION</u>:** Vendors, by submitting a signed bid, certify that the accompanying bid is not the result of, or affected by, any unlawful act of collusion with any other person or company engaged in the same line of business or commerce, or any other fraudulent act punishable under Tennessee or United States law.
- **1.17 PAYMENT METHOD:** Knox County utilizes two (2) methods of placing orders for products. The first is the use of Purchase Orders. These Purchase Orders will be issued from the Knox County Procurement Division via the method selected by the Vendor during registration. The Purchase Order will detail the quantity, specific item(s) and the contracted price for each item.

The second method is the use of the Knox County Credit Card (VISA). Orders placed on the credit card will list the same information as the Purchase Order. Vendors will be given the card information and approval to process the transaction for the requesting department. Vendors must indicate in their bid response if the Vendor will accept the Knox County Credit Card (VISA) as form of payment. Bidders are prohibited to charge Knox County any type of merchant fee from their financial institution to accept this type of payment.

**1.18 PROCESSING TIME FOR PAYMENT:** Vendors are advised that a minimum of thirty (30) days is required to process invoices for payment when the invoicing instructions herein are followed.

- **1.19 PROOF OF FINANCIAL AND BUSINESS CAPABILITY:** Bidders must, upon request, furnish satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of these specifications. Knox County will make the final determination as to the bidders' ability.
- **1.20 <u>RECYCLING:</u>** Knox County, in its continuing efforts to lessen the amount of landfill waste and to further recycling efforts, requests that bids be sent electronically. Bids being submitted on paper shall:
  - **1.20.1** Be submitted on recycled paper;
  - 1.20.2 Not include pages of unnecessary advertising;
  - **1.20.3** Be made on both sides of each sheet of paper.
- 1.21 <u>RESTRICTIVE OR AMBIGUOUS SPECIFICATIONS:</u> It is the responsibility of the prospective bidder to review the entire Invitation for Bid (IFB) packet and to notify the Procurement Division if the specifications are formulated in a manner that would unnecessarily restrict competition. Any such protest or question regarding the specifications or bid procedures must be received in the Procurement Division no later than 4:30 p.m. local time on January 20, 2020. These requirements also apply to specifications that are ambiguous.
- **1.22 SIGNING OF BIDS:** In order to be considered all bids must be signed. Please sign the original in blue ink. By signing the bid document, the bidder acknowledges and accepts the terms and conditions stated in the document. When submitting electronically, the submission of the bid constitutes the acceptance of all terms and conditions and will legally bind the vendor to the County's request for goods and/or services and the vendor's subsequent response.
- **1.23 TAXES:** Knox County purchases are not subject to taxation. Tax exemption certificates will be provided upon request.
- **1.24 TERM BID AGREEMENTS:** If this bid results in a term bid Contract with the vendor, Knox County must receive all general price decreases that other similar customers receive.
- 1.25 <u>TITLE VI OF THE CIVIL RIGHTS ACT</u>: "Nondiscrimination in Federally Assisted Programs" "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." 42 U.S.C. section 2000d. It is the policy of Knox County Government that all its services and activities be administered in conformance with the requirements of Title VI.
- **1.26 USE OF BID FORMS:** Vendors must complete the bid forms contained in the bid package. Failure to complete the bid forms may result in rejection of their bid.
- **1.27 VENDOR DEFAULT:** Knox County reserves the right, in case of vendor default, to procure the articles or services from other sources and hold the defaulting vendor responsible for any excess costs occasioned thereby. Should vendor default be due to a failure to perform or because of a request for a price increase, Knox County reserves the right to remove the vendor from the County's bidder's list for twenty-four (24) months.
- **1.28** <u>VENDOR REGISTRATION</u>: Prior to the opening of this bid, *ALL BIDDERS* must be registered with the Procurement Division. A vendor application may be submitted online at <u>www.knoxcounty.org/procurement</u>. Select the On-Line Vendor Registration link and complete the forms. Vendors must be registered with the Procurement Division **prior** to submitting their bid.
- **1.29** WAIVING OF INFORMALITIES: Knox County reserves the right to waive minor informalities or technicalities when it is in the best interest of Knox County.

### SECTION II OBLIGATIONS, RIGHTS AND REMEDIES

These terms and conditions shall be part of the Contract. Knox County reserves the right to negotiate other terms and conditions it deems appropriate and necessary under the circumstances to protect the public's trust.

2.1 <u>ALTERATIONS OR AMENDMENTS:</u> No alterations, amendments, changes, modifications or additions to this Contract shall be binding on Knox County without the prior written approval of the County.

- 2.2 <u>APPROPRIATION:</u> In the event no funds are appropriated by Knox County for the goods or services in any fiscal year or insufficient funds exist to purchase the goods or services, then the Contract shall expire upon the expenditure of previously appropriated funds or the end of the current fiscal year, whichever occurs first, with no further obligations owed to or by either party.
- **2.3 ASSIGNMENT:** Contractor shall not assign or sub-contract this agreement, its obligations or rights hereunder to any party, company, partnership, incorporation or person without the prior written specific consent of Knox County.
- 2.4 <u>BOOKS AND RECORDS</u>: Contractor shall maintain all books, documents, accounting records and other evidence pertaining to the goods and services provided under this Contract and make such materials available at its offices at all reasonable times during the contract period and for three (3) years from the date of the final payment under this agreement for inspection by County or by any other governmental entity or agency participating in the funding of this agreement, or any authorized agents thereof; copies of said records to be furnished if requested. Such records shall include those books, documents and accounting records that represent the Contractor's costs of manufacturing, acquiring or delivering the products and services governed by this agreement.
- **2.5** <u>CHILD LABOR</u>: Contractor agrees that no products or services will be provided or performed under this Contract which have been manufactured or assembled by child labor.
- 2.6 <u>COMPLIANCE WITH ALL LAWS</u>: Contractor is assumed to be familiar with and agrees to observe and comply with all federal, state, and local laws, statutes, ordinances, and regulations in any manner affecting the provision of goods and/or services, and all instructions and prohibitive orders issued regarding this work and shall obtain all necessary permits.
- 2.7 <u>CRIMINAL HISTORY CHECK</u>: Any and all contractors, sub-contractors, successful vendors, vendor employees and school employees agree to comply with Tennessee Code Annotated Section 49-5-413. Tennessee Code Annotated Section 49-5-413 requires that all parties providing services at any Knox County Schools' location must submit to a criminal history records check at their expense. The criminal history check is to be conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation prior to permitting the party to have contact with students or enter school grounds when students are present.
- 2.8 <u>DEFAULT:</u> If Contractor fails to perform or comply with any provision of this Contract or the terms or conditions of any documents referenced and made a part hereof, Knox County may terminate this Contract, in whole or in part, and may consider such failure or noncompliance a breach of Contract. Knox County expressly retains all its rights and remedies provided by law in case of such breach, and no action by Knox County shall constitute a waiver of any such rights or remedies. In the event of termination for default, Knox County reserves the right to purchase its requirements elsewhere, with or without competitive bidding.
- 2.9 <u>GOVERNING LAW:</u> This Contract shall be governed by the laws of the State of Tennessee, and all obligations of the parties are performable in Knox County, Tennessee. The Chancery Court and/or the Circuit Court of Knox County, Tennessee, shall have exclusive and concurrent jurisdiction of any disputes which arise hereunder.
- 2.10 **INCORPORATION:** All specifications, drawings, technical information, Invitation for Bid, Bid, Award and similar items referred to or attached or which are the basis for this Contract are deemed incorporated by reference as if set out fully herein.
- 2.11 INDEMNIFICATION/HOLD HARMLESS: Contractor shall indemnify, defend, save and hold harmless Knox County, its officers, agents and employees from all suits, claims, actions or damages of any nature brought because of, arising out of, or due to breach of the agreement by Contractor, its subcontractors, suppliers, agents, or employees or due to any negligent act or occurrence or any omission or commission of Contractor, its subcontractors, suppliers, agents, suppliers, agents or employees.
- **2.12 INDEPENDENT CONTRACTOR:** Contractor shall acknowledge that it and its employees serve as independent contractors and that Knox County shall not be responsible for any payment, insurance or incurred liability.

- 2.13 **INSPECTION AND ACCEPTANCE:** Warranty periods shall not commence until Knox County inspects and formally accepts the goods and/or services. The terms, conditions and timing of acceptance shall be determined by Knox County. Knox County reserves the right to reject any or all items or services not in conformance with applicable specifications, and Contractor assumes the costs associated with such nonconformance. Acceptance of goods or services does not constitute a waiver of latent or hidden defects or defects not readily detectable by a reasonable person under the circumstances.
- 2.14 IRAN DIVESTMENT ACT: By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to Tennessee Code Annotated § 12-12-106.
- 2.15 <u>LIMITATIONS OF LIABILITY:</u> In no event shall Knox County be liable for any indirect, incidental, consequential, special or exemplary damages or lost profits, even if Knox County has been advised of the possibility of such damages.
- 2.16 NON-DISCRIMINATION AND NON-CONFLICT STATEMENT: Contractor agrees that no person on the grounds of handicap, age, race, color, religion, sex or national origin shall be excluded from participation in, or be denied benefits of, or be otherwise subjected to discrimination in the performance of this agreement or in the employment practices of Vendor. Contractor shall upon request show proof of such non-discrimination and shall post in conspicuous places available to all employees and applicants notices of non-discrimination. Contractor covenants that it complies with the Fair Wage and Hour Laws, the National Labor Relations Act, and other federal and state employment laws as applicable. Contractor covenants that it does not engage in any illegal employment practices.

Contractor covenants that it has no public or private interest and shall not acquire directly or indirectly any interest, which would conflict in any manner with the provision of its goods or performance of its services. Contractor warrants that no part of the total contract amount provided herein shall be paid directly or indirectly to any officer or employee of Knox County as wages, compensation, or gifts in exchange for acting as officer, agent, employee, sub-contractor or consultant to Contractor in connection with any goods provided or work contemplated or performed relative to the agreement.

- 2.17 <u>ORDER OF PRECEDENCE:</u> In the event of inconsistent or conflicting provisions of this Contract and referenced documents, the following descending order of precedence shall prevail: (1) Contract, (2) Invitation for Bids, (3) Bid, (4) Award, (5) Special Terms and Conditions, (6) General Terms and Conditions, (7) Specifications, (8) Drawings.
- **2.18** <u>**REMEDIES:**</u> Knox County shall have all rights and remedies afforded under the U.C.C. and Tennessee law in Contract and in tort, including but not limited to rejection of goods, rescission, right of set-off, refund, incidental, consequential and compensatory damages and reasonable attorney's fees.
- **2.19 <u><b>RIGHT TO INSPECT:**</u> Knox County reserves the right to make periodic inspections of the manner and means the service is performed or the goods are supplied.
- **2.20 SEVERABILITY:** If any provision of this Contract is declared illegal, void or unenforceable, the remaining provisions shall not be affected but shall remain in force and in effect.
- 2.21 <u>TAX COMPLIANCE:</u> Pursuant to Resolution R-07-1-903 passed by the Commission of Knox County, Tennessee, Contractor hereby acknowledges, by submission of its bid and signature that it is current in its respective Federal, State, County, and City taxes of whatever kind or nature and is not delinquent in any way. Delinquent status must be disclosed or risk debarment by the Knox County Procurement Division.
- **2.22 <u>TERMINATION</u>:** County may terminate this agreement with or without cause at anytime. In the event of termination by either party, fees due for services satisfactorily performed or goods accepted prior to the termination date shall be paid.
- 2.23 <u>WARRANTY:</u> Contractor warrants to Knox County that all items delivered and all services rendered shall conform to the specifications, drawings, bid and/or other descriptions furnished and/or incorporated by reference, and will be fit for the particular purpose purchased, of merchantable quality, good workmanship, and free from defects. Contractor extends to Knox County all warranties allowed under the U.C.C.

Contractor shall provide copies of warranties to the County. Return of merchandise not meeting warranties shall be at contractor's expense.

#### SECTION III SPECIAL TERMS AND CONDITIONS

- 3.1 <u>INTENT:</u> The intent of these specifications is to obtain a contractor(s) to augment the efforts of the Knox County Engineering and Public Works Department with Traffic Signal Maintenance and Service. Award will be based on Best Value. Best Value means more than low cost. It includes initial cost and service quality, which includes previous work history and performance.
- **3.2** <u>ACCEPTANCE:</u> Bidders are advised that the payment of an invoice does not necessarily constitute as an acceptance of services that are provided. Acceptance may require a specific written action by Knox County so stating.
- 3.3 <u>ADDITIONS/DELETIONS OF GOODS/SERVICES:</u> Knox County reserves the right to add goods and/or services to this term bid or delete goods and/or services that Knox County deems necessary. Any additions/deletions must be approved in writing by Knox County Procurement prior to any changes in service.
- **3.4** <u>AGENCY CONTACTS:</u> Contractor(s) will be given a list of key personnel directly associated with the service to be performed for contact information. Only Knox County Procurement Division will have the authority to make changes during the term of this agreement and in compliance with the resulting contract.
- 3.5 <u>AWARD STATUS:</u> Knox County intends to issue a one (1) year award. Upon the mutual agreement of each vendor and Knox County, the award may be extended for four (4) additional years, one (1) year at a time. This may result in a total of five (5) years. Knox County reserves the right to purchase these items/services from other sources if the need arises. Knox County reserves the right to revoke the award if a pattern of unavailability arises with the vendor. Should Knox County desire not to renew, no reason needs to be given.
- **3.6 BACKGROUND:** There are currently eighty-two (82) traffic signals. Fourteen (14) of the signalized locations have advance flashers, as well as two (2) standalone overhead flashers. There are also ninety-three (93) school zone flashers with a combination of page clock systems, web-based GSM, and manual serial cable communications. Knox County also has the following: eleven (11) actuated crosswalk flashers (RRFBs), high mast street lighting at interstate interchanges, street lights for four (4) roundabouts, one (1) fire department emergency warning flasher, two (2) radar speed detection signs, Wavetronic radar systems, Autoscope and Grid Smart camera systems. This bid is intended to provide preventive maintenance as well as service calls for the replacement or modification of these items. A complete list of the locations will be provided to the successful bidder. All locations are within Knox County limits.
- **3.7 BACKGROUND CHECKS:** A Knox County Sheriff's Office background check may be required for all employees of the vendor's staff providing services on Knox County property. Certain felony convictions will prohibit individuals from entering these facilities. All costs associated with background checks will be the responsibility of the Contractor.
- **3.8** <u>**BID ENVELOPE COVER:**</u> The bid envelope cover sheet <u>must</u> be filled out completely and attached to the outside of your bid. Failure to do so will result in the rejection of your bid.
- **3.9 <u>BIDDER OBLIGATION:</u>** Each bidder shall become fully acquainted with conditions relating to the scope and restrictions attending the execution of the work under this IFB. The failure or omission of a bidder to become acquainted with existing conditions shall no way relieve the bidder of any obligations with respect to this IFB or to the Contract.
- **3.10 <u>BID EVALUATION:</u>** In evaluating the bids, Knox County reserves the right to use any or all of the ideas from the bids submitted without limitation and to accept any part or all of the successful bid in selecting an operation which is judged to be in the best interest of the Knox County. All material submitted becomes the property of Knox County.
- 3.11 <u>BIDS REQUESTED ON BRANDS OR EQUAL:</u> Unit price bids are requested on products that equal or exceed the quality and performance of the brands and model numbers listed. References to brand names, trade names, model numbers or other descriptions particular to specific brand products are made to establish a required level of quality and functional capabilities and are not intended to exclude other products of that level. Comparable products of other manufacturers will be considered if proof of comparability is contained in the bid.

It shall be the responsibility of the bidders, including bidders whose product is referenced, to furnish with the bid such specifications, catalog pages, brochures or other data as will provide an adequate basis for determining the quality and functional capabilities of the product offered. Failure to provide this data may be considered valid justification for rejection of a bid.

- **3.12** <u>CERTIFICATION</u>: Vendor's equipment operators shall be certified in the proper operation of the equipment they will provide. Certifications of technicians shall be included in the bid package.
- 3.13 CHANGES AFTER AWARD: It is possible after award that Knox County may change its needs or requirements. Knox County reserves the right to make such changes after consultation with the Contractor(s). Should additional costs arise, Knox County reserves the right to consider accepting these charges provided the Contractor(s) can document the increased costs. Knox County also reserves the right to accept proposed service changes from the Contractor(s) if they will lower the cost to Knox County and/or provide improved service.
- 3.14 <u>CODES, PERMITS AND LICENSES:</u> All work shall comply with the applicable rules of the <u>National Electrical Code</u>, the <u>National Fire Codes</u>, (published by the National Fire Protection Association), State and Local codes and ordinances, and the terms and conditions of the services of the electrical utility, as well as any other authorities that may have lawful jurisdiction pertaining to the work specified. None of the terms or provisions of this specification shall be construed as waiving any other rules, regulations or requirements of these authorities. The contractor shall procure all necessary permits or licenses to carry out his work, and shall pay the lawful fee therefore, as well as for any inspection fee or the cost of any certificate of approval.

All electrical materials used shall be Underwriter Laboratory listed and approved including, but not limited to, the luminaire assembly unit. In any instance where these specifications call for materials for construction of a better quality or larger size than required by the codes, the provisions of these specifications shall take precedence. Conversely, should the codes call for better quality or larger size, the codes shall govern.

- 3.15 <u>COMMUNICATIONS:</u> The successful execution of this Contract will require extensive communication between all parties involved. While information may be transmitted via telephone, it should always be followed up with a fax transmission or e-mail. It is essential that the Contractor have an efficient and properly working fax machine as well as e-mail capabilities. The Contractor will be required to submit a list of individuals, along with direct phone number, cell phone numbers, fax numbers and e-mail addresses to the agency contracts. These individuals must be familiar with the Knox County Contract and have the authority to adjust as requested by Knox County.
- **3.16** <u>COMPLIANCE WITH ALL APPLICABLE REGULATIONS:</u> Vendor agrees and covenants that the company, its agents and employees will comply with all City, County, State and Federal codes, laws, rules and regulations applicable to the business to be conducted under this Contract. If the Vendor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, the Vendor shall bear all costs arising from them.
- **3.17 CONTACT PERSONNEL:** It shall be essential to the success of this Contract to develop a good working relationship with the Contractor(s). It is imperative that the Knox County account be handled efficiently and professionally. Knox County should be assigned no more than two (2) Contractor contacts to handle billing inquiries and service related issues. In the event one (1) or both contacts leave the Knox County account, the Contractor shall formally introduce the new contacts to County personnel. These contacts must be knowledgeable of the County's account to avoid any interruption of service.
- 3.18 <u>CONTRACT EXECUTION:</u> The award of this bid may result in a Contract between Knox County and the successful Contractor(s). The Contract must be voted on by the Knox County Commission and receive a majority vote. The successful Vendor(s) may be required to be present at the full Commission Meeting to answer questions relating to the equipment provided and services performed. Adequate notification will be given by Knox County Procurement Division if the Vendor(S) will need to attend this meeting. There shall be no cost to Knox County Procurement Division <u>will not</u> accept any Contractor's Contract. If these types of Master Agreements, Service Agreements, Terms of Agreements or other submitted Contract agreements are submitted, they <u>will</u> be rejected.

- **3.19 CONTRACTOR'S DUTIES:** All work performed under this Contract shall be performed in accordance with all provisions of these specifications or plans and must be approved in writing by the County or his representative. The Contractor shall be presumed to have made a reasonable inspection of the premises prior to the time of bidding and shall be held responsible for all information available through such inspections. Immediately upon discover the contractor shall bring to the attention of the County any conflicts that may occur among the various provisions of the specifications and plans. The County shall resolve such conflicts and shall be responsible for any costs reasonably incurred by the contractor due to such conflict. Failure of the contractor to bring conflicts or exceptions to the attention of the County to require any changes deemed necessary before acceptance by the County.
- **3.20** <u>DELIVERY TIME:</u> Contractor must be able to provide traffic signal maintenance and service that Knox County desires within a twenty-four (24) hour time period after phone call is received from Knox County. Failure to do so may result in the termination of this Contract.
- **3.21 DESTINATION AND DELIVERY:** Bidders must include all destination and delivery charges in their price. **There will be no extra hidden charges.** Delivery must be "free on board" to the County department.
- **3.22 DISCONTINUED ITEMS:** The successful vendor(s) shall notify the Knox County Procurement Division of any items that have been discontinued and recommend an appropriate substitution. The Knox County Engineering and Public Works Department will be the sole judge if the substitution is appropriate.
- **3.23 DRUG-FREE WORKPLACE:** If the Contractor has five or more employees receiving pay: the Contractor shall have a drug-free workplace program that complies with Title 50, Chapter 9 of the Tennessee Code Annotated, shall provide the affidavit (Attachment B) required by Public Acts, 2000, Chapter 918.
- **3.24 EQUIPMENT PERFORMANCE:** If equipment or parts is delivered to any site and does not work properly, the Contractor must pick up the equipment delivered and deliver another piece of equipment that does work properly at no cost to the County. Knox County will not be charged any time (hours) for any faulty equipment.
- 3.25 **EVALUATION CRITERIA:** This bid will be evaluated using the following criteria:

| Price                       | 70 Points |
|-----------------------------|-----------|
| Capabilities and Experience | 30 Points |

- **3.26 EVALUATION REVIEW:** Knox County reserves the right to use all pertinent information that might affect the County's judgment as to the appropriateness of an award to the best evaluated bidder. This information may be appended to the bid evaluation process results. Information on a service provider from reliable sources, and not within the service provider's bid, may also be noted and made part of the evaluation file. Knox County shall have sole responsibility for determining a reliable source. Knox County reserves the right to conduct written and/or oral discussions/interviews after the bid opening. The purpose of such discussions/interviews is to provide clarification and/or additional information to make an award that is in the best interest of Knox County.
- **3.27 EXCEPTIONS TO SPECIFICATIONS:** Bidders taking exception to any part or section of these specifications shall indicate such exceptions in their bid response. Failure to indicate any exceptions shall be interpreted as the bidder's intent to fully comply with the specifications as written. Conditional or qualified offers are subject to rejection in whole or in part. Exceptions will be negotiated for a mutual resolution.
- **3.28 GRATUITIES AND KICKBACKS:** It shall be a breach of ethical standards for any person or company to offer, give, or agree to give any employee or former employee, or for any employee or former employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim, or controversy or other particular matter, pertaining to any program requirement of a contract or subcontract or to any solicitation or proposal therefore. It shall be a breach of ethical standards for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contract or order. Breach of the provisions of this paragraph is, in addition to a breach of this Contract, a breach of ethical standards which may result in civil or criminal sanction and/or debarment or suspension from being a contractor or subcontractor under Knox County contracts.

- **3.29 INCLEMENT WEATHER:** During periods of inclement weather in Knox County, the Procurement Division will enact the following procedures in regards to solicitations and weather delays.
  - If the Mayor closes the Administrative offices prior to the time set for solicitation opening of any business day, all solicitations due that same day will be moved to the next operational business day.
  - Other weather issues shall be at the sole discretion of the Procurement Director.
  - Knox County shall not be liable for any commercial carrier's decision regarding deliveries during inclement weather.
- **3.30 INSURANCE:** The successful vendor must carry the insurance as indicated on the Insurance Attachment hereto. As proof the vendor's willingness to obtain and maintain the insurance, the vendor must complete, sign and have its insurance agent sign the attachment and submit it with the bid.

Upon the Notification of Intent to Award, the successful vendor will be required to submit a Certificate of Insurance (COI) with the specified coverage and listing Knox County as additional insured; Endorsement Page(s) shall be included. It shall be the successful vendor's responsibility to keep a current COI and Endorsement Page(s) on file with Knox County Procurement as long as the Contract is in effect.

- **3.31 <u>INVOICE DETAIL:</u>** Knox County is requesting invoices to show the following detail to help expedite review and payment. The Contractor(s) may be required to modify invoicing procedures to show the detail. All potential Contractor(s) are hereby cautioned that Knox County will only pay from original invoices and not facsimiles or copies. Invoices which do not adhere to these details may be returned to the Contractor for correction.
  - **3.31.1** The invoice must show the amount due to the Contractor by Knox County.
  - **3.31.2** Invoices for Routine Inspections must show: the date the service or product was provided; the zone the work was performed in; the intersection(s) where Routine Inspections were preformed; the number of hours for the electrician, including level; the number of hours for each truck; the quantity of each item purchased; the associated unit price as per the Contract for each item; and the item total.
  - **3.31.3** Invoices for Trouble Calls must show: the date the service or product was provided; the intersection where Trouble Calls were performed; the number of hours for the electrician, including level; the number of hours for each truck; the item description; work order number (include a copy of the work order with the invoice); the quantity of each item purchased, the associated unit price as per the Contract for each item, and the item total.
  - **3.31.4** Invoices are to be original and uniquely pre-numbered.
  - **3.31.5** Invoices which do not show this information are subject to rejection.
- **3.32 INVOICE REVIEW:** Knox County shall review all invoices for adherence to the terms and conditions of the Contract. Variations from the Contract and Contract pricing are strictly prohibited. Any variations found on the invoice will result in the rejection of those invoices. Rejected invoices will be returned to the Contractor(s) for correction. If a discount for prompt payment is offered, the timeline does not commence until Knox County receives the invoice.
- **3.33 INVOICING PROCEDURES:** Knox County requests that invoices be easy to read and understand. Invoices are to be original and uniquely pre-numbered. Each participating agency to this Contract may require different invoicing information and procedures. This information and procedures shall be provided to the successful Contractor(s) prior to Contract execution. There shall be no additional charges for this information and procedures to be included.

Invoices shall be sent to the "billing" address printed on the Purchase Order. Each department or division of Knox County is responsible for its own budget. Departments cannot charge or pay bills for another department. Therefore, it is critical that your business invoices specify the department that desire to purchase from you. Do not credit payments to any other department's account. Invoices must be submitted in triplicate and must match the corresponding Purchase Order number. There shall be no component billing.

**3.34** <u>KNOX COUNTY PROPERTY:</u> Any materials removed by the awarded vendor shall remain the property of Knox County Government. Any unused or replaced parts shall be returned to Knox County Engineering and Public Works at 205 W. Baxter Avenue, Knoxville, TN 37917 for reuse or disposal.

- **3.35** <u>**LIABILITY:**</u> All collected material shall become the liability of the vendor immediately upon the vendor's handling of collected material and continuing until delivery is completed at Knox County Engineering and Public Works. The vendor must agree to indemnify, defend, and hold Knox County harmless from all liability arising from the transporting of said collected material. The awarded vendor is responsible for transport of all materials to Knox County Engineering and Public Works and must secure all material in a safe manner. The awarded vendor will be responsible for any incidents that may occur during the repair, removal and/or transport of equipment under this Contract.
- **3.36** <u>LICENSING REQUIREMENTS</u>: Vendors <u>must</u> be properly licensed, if applicable, by the State of Tennessee Licensing Board for General Contractors for the type of work requested and <u>must</u> submit of a copy of the license with their bid. All licensing must be in accordance with Tennessee Code Annotated.
- 3.37 <u>MANDATORY PRE-BID CONFERENCE:</u> There will be a <u>MANDATORY</u> Pre-Bid Conference on January 8, 2020 beginning at **10:00 a.m. local time**. The Pre-Bid Conference will be at Knox County Procurement, 1000 North Central Street, Suite 100, Knoxville, TN 37917. The Pre-Bid Conference will begin promptly at 10:00 a.m. local time. Bring a copy of the bid document with you. Prospective Bidders <u>MUST</u> have a representative present at this meeting in order for their bid to be considered.
- **3.38 MANUFACTURER AND BRAND NAME:** Vendor must note the manufacturer and brand name of the items being bid. The phrases "as specified" or "as requested" are not acceptable. Failure to include the manufacturer and brand name may result in the bid being non-responsive and disqualified.
- 3.39 MATERIAL/LABOR QUALITY: Unless otherwise specified, all materials must be of a commercial grade or better.
- 3.40 <u>MOST FAVORABLE PRICING</u>: Contractor agrees to guarantee that Knox County will receive the best price offered by your company for similar services and products. If at any time during the Contract period your company offers a better price to another customer and prior notification of said price reduction is not properly communicated to Knox County, upon discovery Knox County reserves the right to take any or all of the following actions:
  - a. Cancel the Contract, if it is currently in effect;
  - **b.** Determine the amount that the participating agency was overcharged, and submit a request for payment from the Contractor for that amount.
- **3.41** <u>NEW MATERIAL:</u> Unless specified otherwise in the bid package, the bidder must provide new supplies. New, as used in this clause, means previously unused materials. Material includes, but is not limited to, raw material, parts, items, components, and end products. Bidder submission of other than new materials may be cause for the rejection of their bid.
- **3.42 NEWS RELEASES BY VENDORS:** As a matter of policy, Knox County does not endorse the services of a Contractor. A Contractor will not make news releases concerning any resultant Contract from this solicitation without the prior written approval of Knox County.
- **3.43 NO CONTACT POLICY:** After the date and time that the vendor receives this solicitation, any contact initiated by any bidder with any Knox County representative, other than the Procurement Division representative listed herein, concerning this Invitation for Bid, is strictly prohibited. Any such unauthorized contact may cause the disqualification of the bidder from this procurement transaction.
- **3.44** OFFER WITHDRAWAL: No bid can be withdrawn after it is filed unless the bidder makes a request in writing to the Knox County Procurement Division **prior** to the time set for the opening of bids or unless the County fails to accept within ninety (90) business days after the date fixed for opening the Invitation for Bid.
- 3.45 PAYMENTS TO CONTRACTORS: The Contractor will be paid for preventive maintenance activities on a monthly basis. The invoice shall cover the calendar month (for example: December 1 through December 31). The invoice shall be delivered to the Knox County Engineering and Public Works Department by the first week of the following month. The invoice shall name those signals and/or flashers that received preventive maintenance and on which day during that 1-month period. A separate invoice shall be sent for response calls. The response call invoice shall be handled in the same manner as the preventive maintenance call. The response call invoice shall include a brief description of the issue found and the solution that was made for that issue.

The number of signals and flashers are expected to fluctuate during the life of this Contract and the Contactor will only be paid for what is in Knox County's jurisdiction. Knox County will inform the Contractor of any signals, beacons and/or flashers that are part of any annexations.

- **3.46 PERSONAL PROPERTY:** The successful vendor(s) shall be fully responsible for all personal property located within the area to be serviced. This shall include, but not limited to, mailboxes, driveway culverts, flower gardens, poles, etc. The successful vendor(s) shall make immediate notification to the Knox County inspector assigned to that project of any issues and/or damages. The property owner shall also be notified immediately and a course of corrective action discussed and agreed upon at the earliest possible time.
- **3.47 POSSESSION OF WEAPONS:** All vendors and their employees and their agents are prohibited from possessing any weapons on Knox County property without prior written consent from the County. In the case of a vendor whose contract requires possession of firearms or other weapons to successfully complete their contract, vendor must provide personnel who are bonded to bear said weaponry.
- **3.48 PRICING:** The Contractor(s) warrants that the unit price stated for all items shall remain firm for a period of twelve (12) months from the first day of the Contract period. If the Contractor's price is increased after the initial year, Knox County must be given a written notice to consider. Such a request shall include as a minimum, (1) the cause for the adjustment; (2) the amount of the change requested with documentation to support the requested adjustment. Price increases will only be considered at the renewal period(s). If the price increase is rejected the vendor may:
  - a. Continue with the existing prices;
  - **b.** Request a lower price increase;
  - c. Not accept the renewal offer.

Any price increase shall not exceed the Consumer Price Index (CPI) for all Urban Consumers; the most recent month in effect at time of renewal(s) will be used to determine CPI cap. However, Contractor(s) must submit proof of price increase. If a price increase is approved by Knox County Procurement and the requesting department the approval notification will be done in writing and the Contractor(s) will be notified of the new price schedule and the effective date of the increase. This documentation will become part of the bid file. No approvals will be authorized verbally.

- **3.49 PUBLIC RECORDS ACT:** Knox County is subject to the Tennessee Public Records Act 10-7-503 et seq. Bidders are cautioned that all documents submitted on behalf of this Invitation for Bid shall be open to the public for viewing and inspection and Knox County will comply with all legitimate requests.
- **3.50 <u>QUALITY CONTROL:</u>** Vendors are obligated to supply parts that are of a sufficient quality to be expected to perform under the demands of the operations requirements of Knox County. Continued premature failure of said parts shall be cause for termination of the Contract.
- **3.51 <u>QUARTERLY USER MEETINGS</u>: Knox County shall schedule quarterly user meetings to discuss and exchange information regarding the service to be performed under this agreement. Adequate notification shall be provided prior to the meeting schedule.**
- **3.52 <u>QUANTITIES:</u>** Knox County does not guarantee any quantities of items to be purchased. For informational purposes, Knox County spent approximately \$235,000 for these services during the Fiscal Year from July 01, 2018 through June 30, 2019.
- **3.53** <u>**REFERENCES:**</u> Vendors must submit a list of three (3) references with which you have placed this type of service within the past three (3) years. Show the name of the agency or institution, person to contact, their contact information, and the nature and size of the contract. Do not list Knox County Government or Knox County Schools as a reference.

Each vendor is responsible for obtaining approval to submit and confirming the contact information provided for each reference. Knox County will not be responsible for gathering additional information for references that are incomplete or incorrect. Reference Forms that cannot be delivered with the contact information listed, not returned prior to the deadline listed on the form, or not returned at all will be scored accordingly.

- **3.54 <u><b>REJECTION OF BIDS:**</u> Knox County reserves the right to reject any and all bids received as a result of this request and to waive any informality, technical defect or clerical error in any bid, as the interests of the County may require. Non-acceptance of any bid will be devoid of any criticism of the bid and of any implication that the bid is deficient in any manner. Non-acceptance of any bid shall be construed as meaning simply that the County does not deem the bid to be acceptable or that another bid was deemed to be more advantageous to Knox County for the particular services proposed.
- **3.55** <u>**REPLACEMENT OF DAMAGED PROPERTY:**</u> The Contractor shall replace all property damaged by the Contractor including fences, trees, plants, grass, walks, drives, building surfaces, etc.
- **3.56** <u>**REMOVAL OF VENDOR'S EMPLOYEES:**</u> The successful vendor(s) agrees to utilize only experienced licensed, responsible and capable people in the performance of the work. Knox County may require that the successful vendor(s) remove from the job covered by this contract, employees who endanger persons or property or whose continued employment under this contract is inconsistent with the interest of Knox County.
- **3.57 SAFETY AND PROTECTION:** The Contractor(s) shall be solely and completely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work to be performed. Furthermore, the Contractor is solely responsible for the training of all of their employees on all safety issues and for assuring compliance as required by the Occupational Safety and Health Act (OSHA), the Environmental Protection Agency (EPA), and any other Regulatory Agency for the service.

The Contractor(s) shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent injury to, all employees on the work site and other persons, including but not limited to, the general public who may be affected thereby. All work is to be done as required as by TOSHA, OSHA, EPA and AHERA.

Contractor(s) shall be required to furnish their employees with the proper personal protective clothing and equipment. Contractor(s) shall also be required to dispose of this clothing and equipment in compliance with all regulatory requirements.

Vendor will ensure that its employees observe and exercise all necessary caution and discretion so as to avoid injury to person or damage to property of any and all kinds. All buildings, appurtenances and furnishings shall be protected by the vendor from damage, which might be done or caused by works performed under this contract. Such damages to the foregoing shall be repaired and / or replaced by approved methods so as to restore the damaged areas to their original condition at the expense of the vendor.

**3.58 SAFETY:** The successful vendor(s) shall exercise good safety precautions while performing the services required in this solicitation. The successful vendor(s) shall have properly trained employees in the safe operation of any and all equipment to be used. All work performed under this contract shall comply with the requirements of the William-Steiger Occupational Safety and Health Act of 1970. This would include any sign, flagman, or road blockage that would be required for safety purposes as per compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways (latest edition).

Vendors, by submission of a signed bid, also affirm that their employees working under this Contract have been properly trained in the safe operation of all equipment and trained in the safe application of quoted product.

**3.59 SUBMIT QUESTIONS:** Prospective bidders may submit questions concerning this solicitation until **4:30 p.m. local time** on **January 20, 2020**. Submit questions as noted in Section 1.1.

### SECTION IV TECHNICAL SPECIFICATIONS

### 4.1 UTILITIES:

**4.1.1** The Contractor will exercise all necessary protective measures to safeguard existing utilities from damage during the performance of all activities performed under this Contract. In the event equipment is required to conjugate around the utilities, the Contractor will be required to furnish such equipment. The cost of protecting utilities from damage and furnishing any special equipment will be included in the price bid for preventive maintenance functions and in other items for response maintenance and design modification activities.

**4.1.2** The Contractor will be solely responsible for contacting all affected utility companies, prior to beginning any work, which may affect various utilities in order to determine the extent to which utility relocations and/or adjustment will be required. The Contractor shall notify each individual utility owner of their plan of operation in the area of the utilities prior to commencing work with exception to an emergency response where the Contractor shall contact the utility owners and request them to properly locate their respective utility on the ground at least three (3) business days prior to commencement of operations around the utility.

### 4.2 TRAFFIC SIGNAL MAINTENANCE AND CONSTRUCTION:

- **4.2.1** The Tennessee Department of Transportation, Bureau of Highways, Nashville, Tennessee Standard Specifications for Road and Bridge Construction January 1, 2015, will be used as the technical specifications for the project.
- **4.2.2** All detours and construction signage shall be in strict accordance with the current "Manual on Uniform Traffic Control Devices."
- **4.2.3** All traffic signal equipment provided shall meet the current "Standard for Traffic Control Systems" published by the National Electrical Manufacturers Association.

#### 4.3 **DEFINITION AND TIMING OF MAINTENANCE ACTIVITIES:**

- **4.3.1** Preventive maintenance is a set of checks and procedures performed at regular intervals. The activities for traffic signals include all of those tasks listed in Appendix A. Note that the conflict monitor is to be bench tested and certified. For the advance flashers, overhead flashers, and school flashers, activities are listed in Appendix B. The various checks and procedures for traffic signals and flashers shall be performed quarterly. The school zone flashers shall have preventive maintenance performed twice per year, once prior to school starting in the Fall (mid August) and once prior to school starting back from Winter Holidays. These services shall be completed approximately fourteen (14) calendar days prior to the start of school to allow for one (1) week advance flash period. In addition, Knox County shall require a thirty (30) day warranty period regarding these preventive maintenance checks and will not be responsible for further expenses necessitated by calls within this thirty (30) day warranty period.
- **4.3.2** Response maintenance is the repair of failed traffic signal equipment and its restoration to safe, normal operation. For the purposes of defining payments to the Contractor all actions will be assigned to one of the following five (5) categories:
  - A. Repair of failures resulting from the impact of an errant vehicle into one of the supporting structure or the impact of an over height vehicle into a signal display or overhead span.
  - B. Repair of failures resulting from floods, lightning, or winds associated with violent storms confirmed by the United States National Weather Service.
  - C. Repair of failures resulting from improper preventive maintenance activities or the failure to perform preventive maintenance activities at the required intervals.
  - D. Repair of failures resulting from conditions which could have been identified and corrected at the time of the preventive maintenance checks.
  - E. Repair of failures resulting from conditions which could not be reasonably anticipated and which could not normally have been identified at the time of the preventive maintenance checks.

Knox County shall make final determinations concerning the assignment of any particular activity to an activity type.

**4.3.3** Design modifications are changes in the design and/or operation from the conditions that existed at the time of the "Notice to Proceed."

#### 4.4 **RESPONSE TIME FOR RESPONSE MAINTENANCE AND MODIFICATION ACTIVITIES:**

**4.4.1** The response time shall be defined as the time that elapses from notification of the Contractor by Knox County until the Contractor arrives at the installation and initiates repair activity. Knox County shall include a description of the condition and the status (urgent, priority, or other) in the notification.

- **4.4.2** The permissible response time for a condition identified as "urgent" in the table in this section (Appendix C) shall not exceed eight (8) hours.
- **4.4.3** The permissible response time for a condition identified as "priority" in the table in this section (Appendix C) shall not exceed sixteen (16) hours.
- **4.4.4** The permissible response time for a condition identified as "other" in the table in this section (Appendix C) shall not exceed twenty-four (24) hours.
- **4.4.5** Depending on the nature of the problem either an emergency repair or final repair shall be implemented.

Emergency repair temporarily restores system operations that provide a reasonable level of service to the users. Emergency repairs to bring the installation to an operational level, which is reasonable under the existing circumstances, shall be completed before leaving the site.

Final repair restores the system to proper and safe operation in accordance with the system specifications. Final repair to bring the installation into full compliance with system specifications should be completed within thirty (30) days unless prohibited by weather or unavailability of equipment.

- **4.4.6** Loop detectors that need to be replaced shall be replaced within two (2) weeks from notification unless Knox County confirms that the weather conditions prohibit the sawing of loops.
- **4.4.7** Modification activities include, but are not limited to, changing timing patterns, changing and/or adding signal head assemblies, adding loop detectors, and adding pedestrian push buttons. Confirmation of any supplies that are ordered by the Contractor shall be sent to Knox County Engineering and Public Works. Either the Contractor or supplier can send the confirmation on the day the order is placed. These types of activities shall be performed within two (2) weeks of receiving the equipment. Knox County shall be notified on the day when the work begins and notified again when the work is completed.

#### 4.5 BID ITEM DESCRIPTIONS AND BASIS OF PAYMENT:

- **4.5.1** <u>Controller and Cabinet:</u> The Contractor will perform all tasks listed in Appendix A of these special provisions. Where replacements of specific hardware items are called for, those replacements will be coordinated and approved by Knox County prior to completing.
- **4.5.2** <u>Signal Display Sections:</u> The Contractor will perform all tasks listed in Appendix A of these special provisions. Where replacements of specific hardware items are called for, those replacements will be coordinated and approved by Knox County prior to completing.
- **4.5.3** <u>Detector Sensors:</u> The Contractor will perform all tasks listed in Appendix A of these special provisions. Where replacements of specific hardware items are called for, those replacements will be coordinated and approved by Knox County prior to completing.
- **4.5.4** <u>Support Structures:</u> The Contractor will perform all tasks listed in Appendix A of these special provisions. Where replacements of specific hardware items are called for, those replacements will be coordinated and approved by Knox County prior to completing.
- **4.5.5** <u>Extra Work Labor</u>: The Contractor will provide trained personnel to perform response maintenance and design modification services. If other personnel categories are required to provide certain services, the hourly rate for those personnel will be established on a negotiated basis.
- **4.5.6** <u>Extra Work Equipment:</u> The Contractor will provide service equipment to perform response maintenance and design modification services. If other types of equipment are required to provide certain services, the hourly rate for equipment categories will be established on a negotiated basis.

Equipment for agreed upon extra work tasks will be paid for at the contract unit price for the various categories listed or at an agreed upon price. The price shall include all direct and indirect costs associated with furnishing the equipment.

**4.5.7** <u>Extra Work Materials:</u> The Contractor will provide materials and control equipment of the types listed as required for response maintenance and design modification services. If other types of equipment are required to provide certain services, the hourly rate for equipment categories will be established on a negotiated basis.

Materials for agreed upon extra work tasks will be paid for at the Contract unit price for the various items listed. The price shall include all direct and indirect costs associated with furnishing the material. Labor and equipment required for installing the materials will be paid for at the bid prices for the respective items.

#### 4.6 LOCATIONS OF INSTALLATIONS INCLUDED UNDER CONTRACT:

The County may add other locations during the time this Contract is in effect. Likewise locations may be subtracted by the County due to annexations. The County will notify the Contractor in writing of proposed locations. The Contractor will be responsible for inspection of the proposed locations. The Contractor will notify the County of the results of the inspection and either accept the location for maintenance under the Contract or notify the County of any major faults and/or deficiencies requiring immediate repair and correction. If repair or correction is needed the contractor will, at the same time, indicate in writing the cost of any proposed extra work.

If the County concurs in the extra work request the contractor will be authorized in writing to under-take the corrective actions. Once the corrective actions are completed the installation will be accepted by the Contractor under all other terms of the Contract just as though it had been included in the original list of locations.

### 4.7 RECORD KEEPING:

- **4.7.1** The Contractor shall maintain a detailed record of all activities. The record system shall be developed and proposed by the contractor and approved by the County.
- **4.7.2** Completed "Traffic Signal Preventive Maintenance Checklist" (see Appendix A) and Advance, Actuated Pedestrian, and Overhead and School Flashers, and Solar Powered Radar Speed Sign Display Preventive Maintenance Checklist (see Appendix B), shall be kept in each controller cabinet (if available) once the maintenance has been performed. Any time that preventive maintenance is performed the referenced Appendix sheet shall be sent to Knox County Engineering and Public Works via email in PDF format.
- **4.7.3** A response maintenance incident log shall be kept in each controller cabinet. The format of the log is provided in Appendix D. In addition, Knox County shall receive an email of the referenced completed form in PDF format each time the PM service is performed.
- **4.7.4** A copy of the current timing plan for each intersection shall be kept in the control cabinet along with the wiring schematics.
- **4.7.5** Knox County shall generate a work order for each response maintenance activity. Each Knox County work order shall be completed and faxed or e-mailed back to Knox County within three (3) business days of receipt. The returned fax or e-mail shall state the date of the repair, the time of arrival of the technician, the repair made and the time the traffic control device returned to normal operation. The fax number and e-mail address shall be provided to the awarded vendor(s).
- **4.7.6** A written report describing items that need to be fixed as a result of the preventive maintenance inspection shall be sent via fax or e-mail to Knox County Engineering and Public Works for their approval.
- **4.7.7** A copy of the report from each conflict monitor test shall be sent via fax or e-mail to Knox County Engineering and Public Works upon completion of each test.
- **4.8 <u>QUALIFICATIONS</u>: The contractor shall supply the names and certifications of staff members <u>with their bid</u>. If an IMSA Level III person is on staff, that person needs to be available at Knox County's request.**

Please note that it is not necessary to return pages one (1) through fifteen (15) or pages twenty-six (26) through thirty (30) with your submittal. You must complete and return pages sixteen (16) through twenty-five (25).

# SECTION V VENDOR INFORMATION, INVITATION FOR BIDS NUMBER 2926, TRAFFIC SIGNAL MAINTENANCE AND SERVICE

Bidders are welcome to attach additional documentation to fully address any required responses. Please clearly reference any attachments to the appropriate subsection.

| 5.1  | Vendor:  |          |            |
|------|--|----------|------------|
| 5.2  | Vendor number as assigned by Knox County:  |          |            |
| 5.3  | Street Address:  |          |            |
|      | City: State: Zip:  |          |            |
| 5.4  | Contact Person:  |          |            |
| 5.5  | Telephone Number:  |          |            |
| 5.6  | Fax Number:  |          |            |
| 5.7  | Vendor's e-mail address:   |          |            |
| 5.8  | By submission of this bid, each bidder and each person signing on behalf of any bidder<br>the case of a joint bid each party thereto certifies as to its own organization, under penalt<br>to the best of its knowledge and belief that each bidder is not on the list created pursua<br>Code Annotated § 12-12-106. | y of per | jury, that |
|      | Authorizing Signature:(Sign in BLUE ink)   |          |            |
|      | (Sign in BLUE ink)   |          |            |
| 5.9  | Vendor's Knox County Business License Number:  |          |            |
| 5.10 | I acknowledge the receipt of: (please write "yes" if you received one)   |          |            |
|      | Addendum 1Addendum 2Addendum 3Addendum 4   | _        |            |
| 5.11 | Do you accept the terms and conditions of the bid? YES NO YES, WITH EX (Please circle your answer)   | CEPTIC   | ON         |
|      | If you do not fully accept the terms and conditions, please note the exceptions below:   |          |            |
| 5.12 | Total Number of Years in Business:   |          |            |
| 5.13 | Will you allow Cooperative Purchasing as detailed in Section 1.9?  | YES      | NO         |
| 5.14 | Did you include the correct number of exact copies as detailed in Section 1.10?  | YES      | NO         |
| 5.15 | Will you accept the Knox County Credit Card as payment as detailed in Section 1.17?  | YES      | NO         |
| 5.16 | Did you include your fully Executed Criminal History Affidavit as detailed in Section 2.7?   | YES      | NO         |
| 5.17 | Did you complete and attach your Bid Envelope Cover Sheet to your bid response as detailed in Section 3.8?   | YES      | NO         |
| 5.18 | Did you include all certifications in your bid response as detailed in Section 3.12?   | YES      | NO         |

# SECTION V VENDOR INFORMATION, INVITATION FOR BIDS NUMBER 2630, TRAFFIC SIGNAL MAINTENANCE AND REPAIR – CONTINUED

| R NAME:  |   |   |
|--|---|---|
| Can you meet the Delivery Time as detailed in Section 3.20 and 4.4?                              | YES   | NO  |
| Did you include your fully executed Drug Free Affidavit form as detailed in Section 3.23?        | YES   | NO  |
| Did you include your fully executed Insurance Checklist as detailed in Section 3.30?             | YES   | NO  |
| Did you include a copy of your current General Contractor's License as detailed in Section 3.36? | YES   | NO  |
| State the Manufacturer and Brand Name of the items you are bidding as detailed in Section 3.38.  |   |   |
| Did you complete and attach the Reference Form as detailed in Section 3.53?                      | YES   | NO  |
| Did you include the names and certifications for your staff members as detailed in Section 4.8?  | YES   | NO  |
| Total Local Staff Size:  |   |   |
| Number of Service Vehicles Locally:  |   |   |
| Major Equipment Owned Locally (may attach a list):   |   |   |
|  |   |   |
|  |   |   |
|  |   |   |
|  |   |   |
|  | Can you meet the Delivery Time as detailed in Section 3.20 and 4.4?<br>Did you include your fully executed Drug Free Affidavit form as detailed in Section 3.23?<br>Did you include your fully executed Insurance Checklist as detailed in Section 3.30?<br>Did you include a copy of your current General Contractor's License as detailed in<br>Section 3.36?<br>State the Manufacturer and Brand Name of the items you are bidding as detailed in<br>Section 3.38.<br>Did you complete and attach the Reference Form as detailed in Section 3.53?<br>Did you include the names and certifications for your staff members as detailed in<br>Section 4.8?<br>Total Local Staff Size: | Can you meet the Delivery Time as detailed in Section 3.20 and 4.4?YESDid you include your fully executed Drug Free Affidavit form as detailed in Section 3.23?YESDid you include your fully executed Insurance Checklist as detailed in Section 3.30?YESDid you include a copy of your current General Contractor's License as detailed in<br>Section 3.36?YESState the Manufacturer and Brand Name of the items you are bidding as detailed in<br>Section 3.38.YESDid you complete and attach the Reference Form as detailed in Section 3.53?YESDid you include the names and certifications for your staff members as detailed in<br>Section 4.8?YES |

5.29 Did you complete the Pricing in Section VI and submit it with your bid? YES NO

#### BID SCHEDULE AND ESTIMATED QUANTITIES, INVITATION FOR BIDS NUMBER 2926, TRAFFIC SIGNAL SECTION VI MAINTENANCE AND SERVICE

### VENDOR NAME:

The quantities estimated in this section are only estimates. Actual quantities may vary. Bidders will be responsible if quantities are over/under the estimations.

#### 6.1 **PREVENTIVE MAINTENANCE BID PRICES:**

|       | Item  | Unit of Measure | Estimated<br>Quantity | Unit Price | Total Price |
|-------|---|-----------------|-----------------------|------------|-------------|
| 6.1.1 | IMSA Certified II                           | Hour            | 350                   | \$         | \$          |
| 6.1.2 | Other Labor                                 | Hour            | 100                   | \$         | \$          |
| 6.1.3 | Bucket Truck                                | Hour            | 400                   | \$         | \$          |
| 6.1.4 | Other Truck                                 | Hour            | 250                   | \$         | \$          |
| 6.1.5 | Uniformed Officer with<br>Marked Patrol Car | Hour            | 100                   | \$         | \$          |

#### 6.2 SERVICE AND REPAIR BID PRICES:

|       | ltem  | Unit of Measure | Estimated<br>Quantity | Unit Price | Total Price |
|-------|---|-----------------|-----------------------|------------|-------------|
| 6.2.1 | IMSA Certified III                          | Hour            | 40                    | \$         | \$          |
| 6.2.2 | IMSA Certified II                           | Hour            | 1,000                 | \$         | \$          |
| 6.2.3 | Other Labor                                 | Hour            | 600                   | \$         | \$          |
| 6.2.4 | Bucket Truck                                | Hour            | 400                   | \$         | \$          |
| 6.2.5 | Other Truck                                 | Hour            | 250                   | \$         | \$          |
| 6.2.6 | Uniformed Officer with<br>Marked Patrol Car | Hour            | 100                   | \$         | \$          |
| 6.2.7 | Loop Saw                                    | LF              | 2,500                 | \$         | \$          |

Grand Total this Contract Bid = \_\_\_\_\_ or

\_\_\_\_\_ dollars and \_\_\_\_\_\_ cents.

MARK-UP PERCENTAGE: Please state the amount of mark-up to be applied to the Contractor's itemized invoice 6.3 for parts replaced during preventive maintenance or service work.

Mark-up \_\_\_\_\_%

#### ATTACHMENT A KNOX COUNTY PROCUREMENT DIVISION INSURANCE CHECKLIST INVITATION FOR BIDS NUMBER 2926

| REQUIRED:            | NUMBER     | NCE MUST SHOW ALL COVERAGES & ENDORSEMENTS<br>TYPE OF COVERAGE |                 | COVERAGE LIMITS |  |                      |
|----------------------|------------|--|-----------------|-----------------|--|----------------------|
| YES                  | 1.         | WORKERS COMPENSATION   |                 |                 | STATUTORY LIMITS OF TEN  |                      |
| YES                  | 2.         | EMPLOYERS LIABILITY  |                 |                 | \$100,000 PER ACCIDENT<br>\$100,000 PER DISEASE<br>\$500,000 DISEASE POLICY LIMIT                            |                      |
| YES                  | 3.         | AUTOMOBILE LIABILITY<br>X ANY AUTO-<br>SYMBOL (1)              |                 |                 | COMBINE SINGLE LIMIT<br>(Per -Accident)<br>BODY INJURY   | \$1,000,000          |
|                      |            |  |                 |                 | (Per –Person)<br>BODY INJURY<br>(Per-Accident)   |                      |
|                      |            |  |                 | ]               | PROPERTY DAMAGE<br>(Per-Accident   |                      |
| YES                  | 4.         | COMMERCIAL GENERAL LIA   | BILITY          |                 |  | LIMITS               |
|                      |            | CLAIM MADE   | X               | OCCUR           | EACH OCCURRENCE  | \$ 1,000,000         |
|                      |            |  |                 |                 | FIRE LEGAL LIABILITY   | \$ 100,000           |
|                      |            |  |                 |                 | MED EXP (Per person)   | \$ 5,000             |
|                      |            | GEN'L AGGREGATE LIMITS<br>PER                                  | APPLIES         |                 | PERSONAL & ADV INJURY  | \$ 1,000,000         |
|                      |            | POLICY PROJEC  | г гос           |                 | GENERAL AGGREGATE  | \$ 2,000,000         |
|                      |            |  |                 |                 | PRODUCTS-COMPLETED<br>OPERATIONS/AG<br>GREGATE   | \$ 2,000,000         |
| YES                  | 5.         | PREMISES/OPERATIONS  |                 |                 | \$1,000,000 CSL BI/PD EACH<br>OCCURRENCE<br>\$2,000,000 ANNUAL AGGREGATE                                     |                      |
| YES                  | 6.         | INDEPENDENT CONTRACTO  | R               |                 | \$1,000,000 CSL BI/PD EACH<br>OCCURRENCE<br>\$1,000,000 ANNUAL AGGRE   |                      |
| YES                  | 7.         | CONTRACTUAL LIABILITY<br>(MUST BE SHOWN ON CERT                | FICATE)         |                 | \$1,000,000 CSL BI/PD EACH<br>OCCURRENCE<br>\$1,000,000 ANNUAL AGGRE   |                      |
| YES                  | 8.         | XCU COVERAGE   |                 |                 | NOT TO BE EXCLUDED   |                      |
| YES                  | 9.         | UMBRELLA LIABILITY COVE<br>PROFESSIONAL LIABILITY              | RAGE            |                 | \$2,000,000  |                      |
| NO<br>NO<br>NO<br>NO | 10.        | ARCHITECTS & ENGIN<br>ASBESTOS & REMOV<br>MEDICAL MALPRACT     | AL LIABIL<br>CE |                 | \$1,000,000 PER OCCURREN<br>\$2,000,000 PER OCCURREN<br>\$1,000,000 PER OCCURREN<br>\$1,000,000 PER OCCURREN | CE/CLAIM<br>CE/CLAIM |
| NO.                  | 44         |  |                 |                 |  |                      |
| NO<br>NO             | 11.<br>12. | MISCELLANEOUS E & O<br>MOTOR CARRIER ACT ENDO                  | RSEMEN          | IT              | \$500,000 PER OCCURRENC<br>\$1,000,000 BI/PD EACH OCC<br>UNINSURED MOTORIST (MC                              | URRENCE              |
| NO                   | 13.        | MOTOR CARGO INSURANCE  |                 |                 |  | •                    |
| NO                   | 14.        | GARAGE LIABILITY   |                 |                 | \$1,000,000 BODILY INJURY,<br>DAMAGE PER OCCURRENC   |                      |
| NO                   | 15.        | GARAGE KEEPER'S LIABILI  | ſΥ              |                 | \$500,000 COMPREHENSIVE<br>\$500,000 COLLISION   |                      |
| NO                   | 16.        | INLAND MARINE BAILEE'S I                                       | SURANC          | E               | \$1,000,000  |                      |
| NO                   | 17.        | DISHONESTY BOND  |                 |                 | \$   |                      |
| NO                   | 18.        | BUILDERS RISK  |                 |                 | PROVIDE COVERAGE IN TH<br>AMOUNT OF THE CONTRAC<br>PROVIDED BY OWNER.  |                      |
| NO                   | 19.        | USL&H  |                 |                 | FEDERAL STATUTORY LIMI   | TS                   |

21. NOTICE OF CANCELLATION, NON-RENEWABLE OR MATERIAL CHANGES IN COVERAGE SHALL BE <u>PROVIDED TO COUNTY AT LEAST 30 DAYS PRIOR TO ACTION. THE WORDS "ENDEAVOR TO" AND "BUT</u> FAILURE TO" (TO END OF SENTENCE) ARE TO BE ELIMINATED FROM THE NOTICE OF CANCELLATION PROVISION ON STANDARD ACCORD CERTIFICATES.

- 22. THE COUNTY SHALL BE LISTED AS AN ADDITIONAL INSURED ON ALL POLICIES EXCEPT WORKERS' COMPENSATION AND AUTO. ENDORSEMENT PAGE(S) SHALL BE PROVIDED WITH EACH CERTIFICATE OF INSURANCE AS LONG AS THE CONTRACT IS IN EFFECT.
- 23. CERTIFICATE OF INSURANCE SHALL SHOW THE BID NUMBER AND TITLE.
- 24. OTHER INSURANCE REQUIRED\_\_\_\_\_

# INSURANCE AGENT'S STATEMENT AND CERTIFICATION: I HAVE REVIEWED THE ABOVE REQUIREMENTS WITH THE BIDDER NAMED BELOW.

Agency Name: \_\_\_\_\_

Authorizing Signature:

BIDDER'S STATEMENT AND CERTIFICATION: IF AWARDED THE CONTRACT, I WILL COMPLY WITH THE CONTRACT INSURANCE REQUIREMENTS.

Bidder Name:

Authorizing Signature:

#### ATTACHMENT B **INVITATION FOR BIDS NUMBER 2926**

## **AFFIDAVIT OF COMPLIANCE**

## WITH

## DRUG-FREE WORKPLACE REQUIREMENTS OF

## **TENNESSEE CODE ANNOTATED, § 50-9-113**

(To be submitted with bid by contractor with 5 or more employees)

I, \_\_\_\_\_, President or other Principal

, swear or affirm that the Officer of \_\_\_\_\_

Name of Company Company has a drug-free workplace program that complies with Title 50, Chapter 9, Tennessee Code Annotated, in effect at the time of this bid submission at least to the extent required of governmental entities. I further swear or affirm that the company is in compliance with Tennessee

Code Annotated, § 50-9-113.

President or Principal Officer

For:\_\_\_\_\_

Name of Company

STATE OF TENNESSEE} COUNTY OF }

Subscribed and sworn before me by \_\_\_\_\_,

President or Principal Officer of \_\_\_\_\_

On this \_\_\_\_\_\_ day of \_\_\_\_\_\_ 2\_\_\_\_.

Notary Public

My Commission expires: \_\_\_\_\_

#### ATTACHMENT C INVITATION FOR BIDS NUMBER 2926

## NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

| STATE | E OF                                      | )                                       |                   |
|-------|---|---|-------------------|
| COUN  | TY OF                                     | )                                       |                   |
|       |   | , being first duly sworn, deposes and s | ays that:         |
| 1.    | He/She<br>has submitted the attached Bid; | of                                      | , the Bidder that |

- 2. He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- 3. Such Bid is genuine and is not a collusive or sham Bid;
- 4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached Bid or of any other bidder, or to secure through any other bidder, or to fix any overhead, profit or cost element of the bid price or the bid price of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against Knox County, TN or any person interested in the proposed contract; and
- 5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by a collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed)

(Title)

Subscribed and sworn to before me

This \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_\_\_

(Signature)

My Commission expires\_\_\_\_\_

#### ATTACHMENT D **INVITATION FOR BIDS NUMBER 2926**

## **AFFIDAVIT OF COMPLIANCE**

## WITH

## TENNESSEE CRIMINAL HISTORY RECORDS CHECK

## **TENNESSEE CODE ANNOTATED, SECTION 49-5-413**

(To be submitted with bid by contractor)

I, \_\_\_\_\_, President or other Principal

Officer of \_\_\_\_\_, swear or affirm that the

Name of Company

Company is in compliance with Public Chapter 587 of 2007, codified at Tennessee Code Annotated 49-5-413, in effect at the time of this bid submission at least to the extent required of governmental entities. I further swear or affirm that the company is in compliance with Tennessee Code Annotated, § 49-5-413.

President or Principal Officer

For: \_\_\_\_\_

\_\_\_\_\_ Name of Company

STATE OF TENNESSEE} COUNTY OF }

Subscribed and sworn before me by \_\_\_\_\_,

President or Principal Officer of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_ 2\_\_\_\_.

Notary Public

My Commission expires: \_\_\_\_\_

#### ATTACHMENT E INVITATION FOR BIDS NUMBER 2926

Bidder shall submit a list of three (3) Contracts of similar size which have been in service for one (1) year or longer.

Reference # 1

| Name of Firm:        |                                 |   |
|----------------------|---------------------------------|---|
| Contact Person:      |                                 |   |
| Email address:       | Fax numbers:                    | - |
| Nature of Contract:  |                                 | - |
| Services Provided:   |                                 | - |
| Dollar amount: \$    | (over the life of the Contract) |   |
| Contract start date: | Contract end date:              | - |
| Reference #2         |                                 |   |
| Name of Firm:        |                                 | _ |
| Contact Person:      |                                 |   |
| Email address:       | Fax numbers:                    |   |
| Nature of Contract:  |                                 | - |
| Services Provided:   |                                 | - |
| Dollar amount: \$    | (over the life of the Contract) |   |
| Contract start date: | Contract end date:              | - |
| Reference #3         |                                 |   |
| Name of Firm:        |                                 |   |
| Contact Person:      |                                 |   |
| Email address:       | Fax numbers:                    | _ |
| Nature of Contract:  |                                 | - |
| Services Provided:   |                                 | - |
| Dollar amount: \$    | (over the life of the Contract) |   |
| Contract start date: | Contract end date:              | - |

#### **BID ENVELOPE COVER**

#### NAME OF PROJECT: TRAFFIC SIGNAL MAINTENANCE AND SERVICE INVITATION FOR BIDS NUMBER 2926

#### SEALED BIDS WILL BE RECEIVED BY:

Knox County Procurement Division 1000 N. Central Street, Suite 100 Knoxville, Tennessee 37917

UNTIL:

2:00 p.m. EST TIME JANUARY 30, 2020 DATE

| COMPL | ETE ALL | <b>BLANKS</b> ! |
|-------|---------|-----------------|
|       |         |                 |

| BIDDER   |                            |                   |       | _ |
|--|----------------------------|-------------------|-------|---|
| STREET ADDRESS   |                            |                   |       | - |
| CITY/STATE/ZIP CODE                                      |                            |                   |       | _ |
| TENNESSEE CONTRACTORS L                                  | ICENSE NUMBER              |                   |       |   |
| LICENSE CLASSIFICATION(if                                | applicable to this project | Dollar            | Limit |   |
| SUBCONTRACTORS TO BE US (If no subcontract work is requi |                            | " in each blank.) |       |   |
|  |                            | LICENSE NO.       |       |   |
| Classification   |                            | _ Expiration Date |       |   |
|  |                            |                   |       |   |

#### **BIDDERS MUST COMPLETE ALL AREAS OF THIS FORM!**

#### APPENDIX A INVITATION FOR BIDS NUMBER 2926

#### Traffic Signal Preventive Maintenance Checklist Minimum Requirements

| Intersection Name:                                    | Date:      |     |      |
|---|------------|-----|------|
| Technician:   | Tim        | e:  |      |
| A. <u>Signal Heads</u>                                |            |     |      |
| Clean lenses and reflectors                           | YES        | NO  |      |
| Check heads are properly aligned                      | YES        | NO  |      |
| Check for water in heads                              | YES        | NO  |      |
| Check for wear on signal cables                       | YES        | NO  |      |
| Check for wear on span wire and mechanical hardware   | YES        | NO  |      |
| Check for bent hoods, wing nuts and hinges            | YES        | NO  |      |
| Check for condition of backplates                     | YES        | NO  |      |
| Check nighttime visibility                            | YES        | NO  |      |
| Check head height                                     | YES        | NO  |      |
| Overhead sign hangers on span wire and upper tether – |            |     |      |
| Are they wearing the messenger cable                  | YES        | NO  |      |
| Sign bolts tight                                      | YES        | NO  |      |
| B. Mast Arms and Poles                                |            |     |      |
| Inspect for rust and spot paint as required           | YES        | NO  |      |
| Inspect joints for rust and cracks                    | YES        | NO  |      |
| Inspect anchor bolts for rust and tightness           | YES        | NO  |      |
| Inspect for structural damage                         | YES        | NO  |      |
| Inspect for horizontal and vertical angle of arm      | YES        | NO  |      |
| Check for water accumulation                          | YES        | NO  |      |
| C. Span Wires and Poles                               |            |     |      |
| Inspect for rust and spot paint as required           | YES        | NO  |      |
| Inspect joints for rust and cracks                    | YES        | NO  |      |
| Inspect anchor bolts for rust and damage              | YES        | NO  |      |
| Inspect for structural damage                         | YES        | NO  |      |
| Check clamps and hardware                             | YES        | NO  |      |
| Check guy wire anchors and guards                     | YES        | NO  |      |
| Check for water accumulation                          | YES        | NO  |      |
| D. <u>Electrical</u>                                  |            |     |      |
| Check lighting  | GOOD       | BAD |      |
| Check operation of fan                                | GOOD       | BAD |      |
| Check operation of thermostat                         | GOOD       | BAD |      |
| Check cabinet circuit breaker                         | GOOD       | BAD |      |
| Check main circuit breaker                            | GOOD       | BAD | NONE |
| Test GFI  | GOOD       | BAD | NONE |
| Voltage at service connection inside cabinet: VAC     |            |     |      |
| Amperage on service inside cabinet: AC+: AC-:         | _ Chassis: |     |      |

## APPENDIX A (Continued) INVITATION FOR BIDS NUMBER 2926

## E. Control Panel

| Check timings against master time sheet   | YES  | NO  |      |
|---|------|-----|------|
| Verify correct time on clock  | YES  | NO  |      |
| Verify communication if in coordinated system   | YES  | NO  |      |
| Activate vehicle recall switch for active phases  | GOOD | BAD |      |
| Activate ped recall switch for active peds  | GOOD | BAD |      |
| Check stop timing switch for proper operation   | GOOD | BAD |      |
| Check Max II switch for proper operation  | GOOD | BAD |      |
| Tighten loose screws on terminal connections  | YES  | NO  |      |
| Check all harnesses for secure and tight connections  | YES  | NO  |      |
| Verify load switches and flasher are firmly inserted in sockets   | YES  | NO  |      |
| Police door operation –   |      |     |      |
| Check hand controller for proper operation  | YES  | NO  | NONE |
| Flash operation   | YES  | NO  | NONE |
| Mercury relay operation   | GOOD | BAD |      |
| Flash transfer relay operation  | GOOD | BAD |      |
| Flash outputs correct   | YES  | NO  |      |
| F Makiala Datastian   |      |     |      |
| F. <u>Vehicle Detection</u>   |      |     |      |
| Leave and the second | 6000 |     | NONE |
| Loops   | GOOD | BAD | NONE |
| Detectors   | GOOD | BAD |      |
| Verify extensions by detector actuation   | GOOD | BAD |      |
| Verify detection within designated zone of detection  | GOOD | BAD |      |
| Verify no adjacent lane detection   | GOOD | BAD | NONE |
| Video   | GOOD | BAD | NONE |
| Radar   | GOOD | BAD | NONE |
| G. Pedestrian Buttons   |      |     |      |
| G. <u>Pedestrian Buttons</u>  |      |     |      |
| Are pedestrian buttons at each end of crosswalk?  | YES  | NO  |      |
| If yes, verify pedestrian signal operation  | YES  | NO  |      |
| If yes, verify timing   | YES  | NO  |      |
| If yes, push button sign alignment and condition  | GOOD | BAD |      |
| in yes, push button sign angliment and condition  | GOOD | BAD |      |
| H. Housekeeping   |      |     |      |
| In <u>nousekeeping</u>  |      |     |      |
| Lubricate hinges and locks  | YES  | NO  |      |
| Check for water accumulation  | YES  | NO  |      |
| Check door gasket for weather tight seal  | YES  | NO  |      |
| Caulk against water if needed   | YES  | NO  |      |
| Vacuum all dust and dirt accumulation in cabinet  | YES  | NO  |      |
| Replace control cabinet filter  | YES  | NO  |      |
| Remove graffiti as needed   | YES  | NO  |      |
| Apply insecticide   | YES  | NO  |      |
| אין אוויכנונועב   | 123  | NO  |      |
| I. <u>Conflict Monitor</u>  |      |     |      |
|   |      |     |      |
| Tested by Knox County owned testing device  | YES  | NO  |      |
| Certified   | YES  | NO  |      |
|   |      |     |      |

#### APPENDIX B INVITATION FOR BIDS NUMBER 2926

#### Advance, Actuated Pedestrian, Overhead and School Flashers, and Solar Powered Radar Speed Sign Display Preventive Maintenance Checklist Minimum Requirements

| Intersection Name:                                  | Date: |    |
|---|-------|----|
| Technician:   | Time: |    |
| A. <u>Signal Heads</u>                              |       |    |
| Clean lenses and reflectors                         | YES   | NO |
| Check heads are properly aligned                    | YES   | NO |
| Check for water in head                             | YES   | NO |
| Check for wear on signal cables                     | YES   | NO |
| Check for wear on span wire and mechanical hardware | YES   | NO |
| Check for bent hoods, wing nuts and hinges          | YES   | NO |
| Check condition of backplates                       | YES   | NO |
| Check nighttime visibility                          | YES   | NO |
| Check head height                                   | YES   | NO |
| B. Span Wires and Poles                             |       |    |
| Inspect for rust and spot paint as required         | YES   | NO |
| Inspect joints for rust and cracks                  | YES   | NO |
| Inspect anchor bolts for rust and damage            | YES   | NO |
| Inspect for structural damage                       | YES   | NO |
| Check clamps and hardware                           | YES   | NO |
| Check guy wire anchors and guards                   | YES   | NO |
| Check for water accumulation                        | YES   | NO |
| C. Other Items as Applicable                        |       |    |
| Verify clock accuracy                               | YES   | NO |
| Verify communication system                         | YES   | NO |
| Verify correct calendar settings                    | YES   | NO |
| Check battery function and life                     | YES   | NO |

#### APPENDIX C INVITATION FOR BIDS NUMBER 2926

#### **Traffic Signal Response Maintenance Status Descriptions**

#### URGENT - Response within eight (8) hours of notification

- 1. Green signal display to two or more conflicting movements
- 2. All signal displays dark
- 3. All red lamps or all yellow lamps out for one or more movements
- 4. Skipping green phase or green stuck on one phase
- 5. Green arrow signal display clearly visible to conflicting movement
- 6. Twisted signal display clearly visible to conflicting movement
- 7. Accident damage creating traffic hazard
- 8. Exposed live wires
- 9. Conflicting indications (i.e., red/green on simultaneously for one movement)
- 10. Any fault associated with a pre-emption system

#### PRIORITY – Response within sixteen (16) hours of notification

- 1. Timing fault causing abnormal congestion or delay
- 2. Don't walk lamp out
- 3. Red lamps out with other lamps for same movement operating
- 4. All green lamps out for one or more movements
- 5. Skipping pedestrian phase
- 6. Accident damage not creating a traffic hazard
- 7. Left-turn arrow lamp out
- 8. Traffic control signal inappropriately operating in flashing mode

OTHER - Response within twenty-four (24) hours of notification

- 1. Yellow lamp out with other yellow lamps for same movement operating
- 2. Green lamp out with other green lamps for same movement operating
- 3. Walk lamp out
- 4. Faulty changeable or blankout message sign
- 5. Twisted signal display not clearly visible to conflicting movement
- 6. Handhold or other cover missing
- 7. Any other fault problem

### APPENDIX D INVITATION FOR BIDS NUMBER 2926

## INTERSECTION: \_\_\_\_\_

| Response | Arrival<br>Time | Date | Technician | Problem | Resolution | Time<br>Operational |
|----------|-----------------|------|------------|---------|------------|---------------------|
| 1        |                 |      |            |         |            |                     |
| 2        |                 |      |            |         |            |                     |
| 3        |                 |      |            |         |            |                     |
| 4        |                 |      |            |         |            |                     |
| 5        |                 |      |            |         |            |                     |
| 6        |                 |      |            |         |            |                     |
| 7        |                 |      |            |         |            |                     |
| 8        |                 |      |            |         |            |                     |
| 9        |                 |      |            |         |            |                     |
| 10       |                 |      |            |         |            |                     |
| 11       |                 |      |            |         |            |                     |
| 12       |                 |      |            |         |            |                     |
| 13       |                 |      |            |         |            |                     |
| 14       |                 |      |            |         |            |                     |
| 15       |                 |      |            |         |            |                     |
| 16       |                 |      |            |         |            |                     |
| 17       |                 |      |            |         |            |                     |
| 18       |                 |      |            |         |            |                     |
| 19       |                 |      |            |         |            |                     |
| 20       |                 |      |            |         |            |                     |
| 21       |                 |      |            |         |            |                     |
| 22       |                 |      |            |         |            |                     |
| 23       |                 |      |            |         |            |                     |
| 24       |                 |      |            |         |            |                     |
| 25       |                 |      |            |         |            |                     |
| 26       |                 |      |            |         |            |                     |
| 27       |                 |      |            |         |            |                     |
| 28       |                 |      |            |         |            |                     |
| 29       |                 |      |            |         |            |                     |