



**INVITATION TO BID (ITB)**

<b>Bid Number:</b> SPLOST-05	<b>Project Name:</b> Pedestrian Crosswalk Improvement – Rectangular Rapid Flashing Beacon
<b>Due Date and Time:</b> October 26 <sup>th</sup> , 2018  <b>Local Time:</b> 4:00 P.M.	<b>Number of Pages:</b> <u>38</u>

<b>ISSUING DEPARTMENT INFORMATION</b>	
<p>City of Clarkston          Keith Barker – City Manager          Issue Date: October 2<sup>nd</sup>, 2018          Phone: 404-296-6489</p>	

<b>INSTRUCTIONS TO BIDDERS</b>	
<p><b>Return Submittal to:</b></p> <p>City of Clarkston          1055 Rowland Street          Clarkston, GA 30021  <u>ATTN:</u> Keith Barker          City Manager</p> <p><b>Hours of Operation:</b> Mon.-Fri. 9am – 5pm</p>	<p><b>Mark Face of Sealed Envelope/Package:</b>  <b>Bid Number:</b> SPLOST-05  <b>Name of Company or Firm:</b> _____</p> <ul style="list-style-type: none"> <li>• <b>Special Instructions:</b> Deadline for Questions: 5:00 PM; October 19<sup>th</sup>, 2018</li> <li>• Email questions to Larry Kaiser at (owner’s representative); <a href="mailto:kaiser@co-infra-services.com">kaiser@co-infra-services.com</a> (call 404-909-5619 to confirm receipt of email)</li> <li>• Refer to Schedule of Events in bid package for additional instructions</li> <li>• A pre-bid meeting will not be held</li> </ul>

<b>BIDDERS MUST COMPLETE THE FOLLOWING</b>	
Bidder Name/Address:	Authorized Bidder Signatory:  (Please print name and sign in ink)
Bidder Phone Number:	Bidder FAX Number:
Bidder State I.D. Number:	Bidder E-mail Address:
<b>BIDDERS MUST RETURN THIS COVER SHEET WITH BID RESPONSE</b>	

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**INVITATION TO BID**  
**PEDESTRIAN CROSSWALK IMPROVEMENT – RECTANGULAR RAPID FLASHING BEACON**

The City of Clarkston (CITY) is accepting sealed bids from qualified firms for **PEDESTRIAN CROSSWALK IMPROVEMENT – RECTANGULAR RAPID FLASHING BEACON** project in conformance with Title 32, Chapter 4, Article 4, and Part 2 of the Official Code of Georgia Annotated. All work will be done in accordance with Georgia Department of Transportation’s (GDOT) Standard Drawings, Standard Specifications as standards and specifications, unless otherwise noted, for the construction and completion of the work required. All bidders must comply with all general and special requirements of the bid information and instructions enclosed herein. Work required under the Contract includes demolition, grading, sidewalk and pedestrian ramp installations, sign and utility relocations and related work tasks.

The project shall be Substantially Complete within **60 calendar** days from the date of issuance of Notice to Proceed.

CITY will receive sealed bids until **4:00 PM; October 26<sup>th</sup>, 2018 at City of Clarkston; 1055 Rowland Street; Clarkston, GA 30021; ATTN: Keith Barker; City Manager.** Bids received after this time will not be accepted. Bids will be opened and publicly read aloud in the City of Clarkston Conference Room at approximately 4:05 PM on October 26<sup>th</sup>, 2018. All interested parties are invited to attend. No pre-bid conference will be held. Apparent bid results will be posted on the City web site; [www.clarkstonga.gov](http://www.clarkstonga.gov) Bids received after the above date and time or in any location other than that specified will not be accepted.

Bidding Documents are available for download from the CITY web site; [www./clarkstonga.gov](http://www./clarkstonga.gov)

Bids shall be presented in a sealed envelope with the bid number (SPLOST-05) and the name of the company or firm submitting clearly marked on the outside of the envelope. **ONE (1) ORIGINAL (PAPER) AND ONE (1) COPY (PAPER) MUST BE SUBMITTED.** Bids will not be accepted verbally, by fax, or email.

Award will be made to the vendor submitting the lowest responsive and responsible bid. The CITY reserves the right to reject any or all bids and re-advertise, to waive any informalities or irregularities and to make an award as deemed in its best interest. The written bid documents supersede any verbal or written prior communications between the parties.

The bid submittal shall also include a bid bond in the form of a certified check or cashier's check in the amount of five percent (5%) of the total bid, made payable to City of Clarkston, Georgia. The selected contractor will be required to submit a one hundred percent (100%) performance bond and one hundred percent (100%) payment bond.

CITY does not discriminate on the basis of disability in the admission or access to its programs or activities. Any requests for reasonable accommodations required by individuals to fully participate in any open meeting, program or activity of the City of Clarkston government shall be directed to Keith Barker; City Manager; 404-296-6489 or [kbarker@cityofclarkston.com](mailto:kbarker@cityofclarkston.com).

All questions regarding the bid documents shall be made via email to the Project Manager; [kaiser@co-infra-services.com](mailto:kaiser@co-infra-services.com). The Project Manager will acknowledge receipt of questions. If bidder does not receive acknowledgement, it’s the bidder’s responsibility to contact the Project Manager at 404-909-5619 to ensure questions are received. The deadline to submit questions is 5:00 PM on October 19<sup>th</sup>, 2018. The City will post “Response to Questions and/or Addendum”, if applicable, on the CITY web site no later than 5:00PM on October 22<sup>nd</sup>, 2018.

To report bid rigging activities call:

**1-800-424-9071**

*The U.S. County of Transportation (DOT) operates the above toll-free “hotline” Monday through Friday, 8:00 AM to 5:00 PM, Eastern Time. Anyone with the knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the “hotline” to report such activities.*

**The “hotline” is part of the DOT’s continuing effort to identify and investigate highway construction contract fraud and abuse, and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.**

**CITY**  
**Invitation to Bid SPLOST-05**  
**BIDDING INSTRUCTIONS**

**FAILURE TO RETURN THE FOLLOWING BID DOCUMENTS COULD RESULT IN THE BID BEING DEEMED NON-RESPONSIVE AND BEING REJECTED:**

<b>Item</b>	<b>Description</b>	<b>Page(s)</b>
1	Filled out and Signed Invitation to Bid	1
2	Bid Form and Addenda Acknowledgement (2 pages)	9-10
3	Bid Bond (3 pages)	11
4	Qualification Signature and Certification	14
5	List of Subcontractors	15
6	Contractor & Subcontractor Affidavit and Agreement (E-Verify)	16-17
7	Disclosure Form	18
8	Certificate of Sponsor Drug Free Workplace	19
9	Bid Schedule of Items – Exhibit A	29

**INFORMATION AND INSTRUCTIONS**

The purpose of this solicitation is to enter into a unit price contract with one firm to be the primary supplier for the work specified in the SPLOST-05 Bid Schedule and the contents of the Bid Package.

No specification expressed or implied shall be construed as any type of restrictive specification that would limit competition.

Unless clearly shown as “no substitute” or any words to that effect, any items in these contract documents which have been identified, described or referenced by a brand name or trade name are for reference only. Such identification is intended to be descriptive, but not restrictive and is to indicate the general quality and characteristics of products that may be offered. Each bid item for which an equivalent item is proposed must be individually identified on the bid sheet with the following information: brand name, model or manufacturer’s number or identification regularly used in the trade. Photographs, specifications and cut sheets shall be provided of the proposed alternative. The CITY shall be the sole judge of the suitability of the proposed alternative and may consider function, design, materials, construction, workmanship, finishes, operating features, overall quality, local service facilities, warranty terms and service or other relevant features.

The CITY reserves the right to cancel the contract at any time with 30 days written notice.

Title to any supplies, materials, equipment or other personal property shall remain the Contractors’ until fully paid for by the CITY

All items to be bid FOB, 1055 Rowland Street, Clarkston, GA 30021. No sales taxes are to be charged.

Any damage to any building or traffic control device, or equipment incurred during the course of work shall be repaired at the contractor’s expense to the complete satisfaction of CITY with no additional expense to the CITY. Prime contractor shall perform **a minimum of 60%** of the work.

## EVALUATION

The CITY intends to evaluate the Invitation-to-Bid (ITB) on the lowest, best, responsible, and responsive vendor.

## INSURANCE REQUIREMENTS

Within 10 days of Notice of Award, and at all times that this Contract is in force, the Contractor shall obtain, maintain and furnish the CITY Certificates of Insurance from licensed companies doing business in the State of Georgia with an A.M. Best Rating A-6 or higher and acceptable to the CITY.

Within 10 days of Notice of Award, and at all times that this Contract is in force, the Contractor shall obtain, maintain and furnish the CITY Certificates of Insurance from licensed companies doing business in the State of Georgia with an A.M. Best Rating A-6 or higher and acceptable to the CITY. Insurance requirements are provided below and included in the CONTRACT AGREEMENT (Section 7.K).

- (1) Requirements: The Contractor shall have and maintain in full force and effect for the duration of this Agreement, insurance insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work by the Contractor, its agents, representatives, employees or subcontractors. All policies shall be subject to approval by the CITY's Attorney as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the CITY.
- (2) Minimum Limits of Insurance: Contractor shall maintain the following insurance policies with limits no less than:
  - (a) Comprehensive General Liability of \$1,000,000 (one million dollars) limit per single occurrence, \$2,000,000 (two million dollars) umbrella, including coverage for bodily and personal injury, sickness, disease or death, injury to or destruction of property, including loss of use resulting therefrom, vandalism, property loss and theft.
  - (b) Comprehensive Automobile Liability (owned, non-owned, hired) of \$1,000,000 (one million dollars) combined single limit per occurrence for bodily and personal injury, sickness, disease or death, injury to or destruction of property, including loss of use resulting therefrom.
  - (c) Workers' Compensation limits as required by the State of Georgia and Employers Liability limits of \$1,000,000 (one million dollars) per accident.
- (3) Deductibles and Self-Insured Retentions: Any deductibles or self-insured retentions must be declared to and approved by the CITY in writing.
- (4) Other Insurance Provisions: The policy is to contain, or be endorsed to contain, the following provisions:

- (a) General Liability and Automobile Liability Coverage.
  - (i) The CITY and CITY Parties are to be covered as insureds. The coverage shall contain no special limitations on the scope of protection afforded to the CITY or CITY Parties.
  - (ii) The Contractor's insurance coverage shall be primary noncontributing insurance as respects to any other insurance or self-insurance available to the CITY or CITY Parties. Any insurance or self-insurance maintained by the CITY or CITY Parties shall be in excess of the Contractor's insurance and shall not contribute with it.
  - (iii) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the CITY or CITY Parties.
  - (iv) Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
  - (v) Coverage shall be provided on a "pay on behalf" basis, with defense costs payable in addition to policy limits. There shall be no cross liability exclusion.
  - (vi) The insurer agrees to waive all rights of subrogation against the CITY and CITY Parties for losses arising from Work performed by the Contractor for the CITY for General Liability coverage only.
- (b) Workers' Compensation Coverage: The insurer providing Workers' Compensation Coverage will agree to waive all rights of subrogation against the CITY and CITY Parties for losses arising from Work performed by the Contractor for the CITY.
- (c) All Coverages:
  - (i) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the CITY.
  - (ii) Policies shall have concurrent starting and ending dates.
- (5) Acceptability of Insurers: Insurance is to be placed with insurers authorized to do business in the State of Georgia and with an A.M. Best's rating of no less than A:VI.
- (6) Verification of Coverage: Contractor shall furnish the CITY with certificates of insurance and endorsements to the policies evidencing coverage required by this clause prior to the start of Work. The certificate of insurance and endorsements shall be on a form utilized by Contractor's insurer in its normal course of business and shall be received and approved by the CITY within ten (10) days of the Notice of Award.

The CITY reserves the right to require complete, certified copies of all required insurance policies, at any time. The Contractor shall provide proof that any expiring coverage has been renewed or replaced at least two (2) weeks prior to the expiration of the coverage.

- (7) Subcontractors: Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated in this Agreement, including but not limited to naming the Parties as additional insureds.
  
- (8) Claims-Made Policies: Contractor shall extend any claims-made insurance policy for at least six (6) years after termination or final payment under the Agreement, whichever is later.
  
- (9) CITY as Additional Insured and Loss Payee: The CITY shall be named as an additional insured and loss payee on all policies required by this Agreement, except the CITY need not be named as an additional insured and loss payee on any Workers' Compensation policy.

### **BONDING REQUIREMENTS**

Each bid must be accompanied with a **BID BOND** (bond only: certified checks or other forms are not acceptable) in an amount equal to five percent (5%) of the base bid, payable to the CITY. Said bid bond guarantees the bidder will enter into a contract to construct the project strictly within the terms and conditions stated in this bid and in the bidding and contract documents, should the construction contract be awarded.

The Successful Bidder shall be required to furnish **PAYMENT AND PERFORMANCE BONDS** for the faithful performance on the contract and a bond to secure payment of all claims for materials furnished and/or labor performed in performance of the project, both in amounts equal to one hundred percent (100%) of the contract price.

Bonds shall be issued by a corporate surety appearing on the Treasury Department's most current list (Circular 570 as amended) and be authorized to do business in the State of Georgia. Bonds shall be on the forms provided by the CITY and subject to the review and approval of the CITY Attorney.

Date of Bond must not be prior to date of Contract. If Contractor is a Partnership, all partners shall execute Bond.

## **OATH**

Prior to commencing the Work, the successful bidder shall execute a written oath as required by O.C.G.A. §§ 32-4-122 and 36-91-21(e).

## **COST OF PREPARING A PROPOSAL**

The costs for developing and delivering responses to this ITB and any subsequent presentations of the proposal as requested by the CITY are entirely the responsibility of the bidder. The CITY is not liable for any expense incurred by the bidder in the preparation and presentation of their proposal. All materials submitted in response to this ITB become the property of the CITY.

**[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]**

**BID FORM and ADDENDA ACKNOWLEDGEMENT**

**TO: CITY OF CLARKSTON**  
**1055 Rowland Street**  
**ATTN: Keith Barker**

**Ladies and Gentlemen:**

In compliance with your Invitation To Bid, the undersigned, hereinafter termed the Bidder, proposes to enter into a Contract with CITY, Georgia, to provide the necessary machinery, tools, apparatus, other means of construction, and all materials and labor specified in the Contract Documents or as necessary to complete the Work in the manner therein specified within the time specified, as therein set forth, for:

**Bid Number SPLOST-05**  
**PEDESTRIAN CROSSWALK IMPROVEMENT – RECTANGULAR RAPID FLASHING BEACON**

The Bidder has carefully examined and fully understands the Contract, Specifications, and other documents hereto attached, has made a personal examination of the Site of the proposed Work, has satisfied himself as to the actual conditions and requirements of the Work, and hereby proposes and agrees that if his bid is accepted, he will contract with the CITY in full conformance with the Contract Documents.

Unless otherwise directed, all work performed shall be in accordance with the Georgia Department of Transportation Standard Specifications, Construction of Transportation Systems (current edition). All materials used in the process of completion of the work included in the Contract will be furnished from Georgia Department of Transportation certified suppliers only.

It is the intent of this Bid to include all items of construction and all Work called for in the Specifications, or otherwise a part of the Contract Documents.

In accordance with the foregoing, the undersigned proposes to furnish and construct the items listed in the attached Bid schedule for the unit prices stated.

The Bidder agrees that the cost of any work performed, materials furnished, services provided or expenses incurred, which are not specifically delineated in the Contract Documents but which are incidental to the scope, intent, and completion of the Contract, shall be deemed to have been included in the prices bid for the various items scheduled.

The Bidder further proposes and agrees hereby to promptly commence the Work with adequate forces and equipment within ten (10) calendar days from receipt of Notice to Proceed and to complete all Work within Sixty (60) calendar days from the Notice to Proceed. If weather affects the required completion schedule, the CITY and selected Bidder will negotiate a new completion date.

Attached hereto is an executed Bid Bond in the amount of \_\_\_\_\_ Dollars (\$  
(Five Percent of Amount Bid). **Bid Bond Amount to be for the largest bid amount submitted.**

If this bid shall be accepted by the CITY and the undersigned shall fail to execute a satisfactory contract in the form of said proposed Contract, and give satisfactory Performance and Payment Bonds or furnish satisfactory proof of carriage of the insurance required within ten days from the date of Notice of Award of the Contract, then the CITY may, at its option, determine that the undersigned abandoned the Contract and there upon this bid shall be null and void, and the sum stipulated in the attached Bid Bond shall be forfeited to the CITY as liquidated damages.

Bidder acknowledges receipt of the following addenda:

Addendum No.	Date Viewed
_____	_____
_____	_____
_____	_____
_____	_____

**Add additional pages as necessary for the Addendum.**

**Bidder further declares that the full name and resident address of Bidder's Principal is as follows:**

Signed, sealed, and dated this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_

Bidder \_\_\_\_\_ (Seal)  
Company Name

Bidder Mailing Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

**[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]**

**BID BOND  
CITY OF CLARKSTON, GEORGIA**

BIDDER (Name and Address):

\_\_\_\_\_

SURETY (Name and Address of Principal Place of Business):

\_\_\_\_\_

OWNER (hereinafter referred to as the "CITY" (Name and Address):

City of Clarkston  
1055 Rowland Street  
Clarkston, GA 30021  
ATTN: Keith Barker

BID

BID DUE DATE:

PROJECT (Brief Description Including Location):

\_\_\_\_\_

BOND

BOND NUMBER:

DATE (Not later than Bid due date):

PENAL SUM: \_\_\_\_\_  
(Words) (Figures)

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby to the CITY, subject to the terms printed below or on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent or representative.

BIDDER

SURETY

\_\_\_\_\_(Seal)

\_\_\_\_\_(Seal)

Bidder's Name and Corporate Seal

Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature and Title:

By: \_\_\_\_\_  
Signature and Title:  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title:

Attest: \_\_\_\_\_  
Signature and Title:

- Note:
- (1) Above addresses are to be used for giving any notice required by the terms of this Bid Bond.
  - (2) Any singular reference to Bidder, Surety, the CITY or any other party shall be considered plural where applicable.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to the CITY upon Default of Bidder the penal sum set forth on the face of this Bond.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension of that time agreed to in writing by the CITY) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1 The CITY accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension of that time agreed to in writing by the CITY) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents; or
  - 3.2 All Bids are rejected by the CITY; or
  - 3.3 The CITY fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension of that time agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon Default by Bidder within 30 calendar days after receipt by Bidder and Surety of a written Notice of Default from the CITY, which Notice will be given with reasonable promptness and will identify this Bond and the Project and include a statement of the amount due.
5. Surety waives notice of, as well as any and all defenses based on or arising out of, any time extension to issue a Notice of Award agreed to in writing by the CITY and Bidder, provided that the total time, including extensions, for issuing a Notice of Award shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond either prior to 30 calendar days after the Notice of Default required in paragraph 4 above is received by Bidder and Surety or later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the State of Georgia.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer or proposal, as applicable under the particular circumstances.

12. The terms of this Bid Bond shall be governed by the laws of the State of Georgia.

**[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]**

**QUALIFICATIONS SIGNATURE AND CERTIFICATION**

I certify that this offer is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same materials, supplies, equipment, or services and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal Law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of the proposal and certify that I am authorized to sign this proposal for the proposer. I further certify that the provisions of the Official Code of Georgia Annotated, including but not limited to Title 32, Chapter 4, Article 4, Part 2 and Sections 45-10-20 et seq. have not been violated and will not be violated in any respect.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Print/Type Name \_\_\_\_\_

Print/Type Company Name Here \_\_\_\_\_

**CORPORATE CERTIFICATE**

I, \_\_\_\_\_, certify that I am the Secretary of the Corporation named as Contractor in the foregoing bid; that \_\_\_\_\_ who signed said bid in behalf of the Contractor, was then (title) \_\_\_\_\_ of said Corporation; that said bid was duly signed for and in behalf of said Corporation by authority of its Board of Directors, and is within the scope of its corporate powers; that said Corporation is organized under the laws of the State of \_\_\_\_\_.

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

-  
\_\_\_\_\_  
(Seal)  
) (Signature)

**[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]**

**LIST OF SUBCONTRACTORS**

I do \_\_\_\_\_, do not \_\_\_\_\_, propose to subcontract some of the work on this project. I propose to Subcontract work to the following subcontractor(s):

**Company #1**

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

Company President & Phone Number: \_\_\_\_\_

**Company #2:**

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

Company President & Phone Number: \_\_\_\_\_

**Company #3:**

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

Company President & Phone Number: \_\_\_\_\_

**ATTACH ADDITIONAL PAGES AS NECESSARY**

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

STATE OF GEORGIA

CITY OF CLARKSTON

**CONTRACTOR AFFIDAVIT AND AGREEMENT**

**By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the CITY has registered with and is participating in a federal work authorization program, in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.**

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the CITY, contractor will secure from such subcontractor(s) similar verification of compliance with OCGA § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 in the form attached hereto bid package. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the CITY at the time the subcontractor(s) is retained to perform such service.

\_\_\_\_\_  
EEV / Basic Pilot Program User Identification Number

\_\_\_\_\_  
BY: Authorized Officer or Agent Date

\_\_\_\_\_  
Print Contractor Name

\_\_\_\_\_  
Title of Authorized Officer or Agent of Contractor

\_\_\_\_\_  
Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN  
BEFORE ME ON THIS THE  
\_\_\_\_ DAY OF \_\_\_\_\_, 201\_

\_\_\_\_\_  
Notary Public  
My Commission Expires:  
\_\_\_\_\_

**[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]**

**STATE OF GEORGIA**

**CITY OF CLARKSTON**

**SUB- CONTRACTOR E-VERIFY**

**By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the CITY has registered with and is participating in a federal work authorization program, in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.**

The undersigned agrees that they shall be in compliance with O.C.G.A. § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08. Sub-contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the CITY at the time the Contractor is retained to perform contact services with the CITY.

\_\_\_\_\_  
EEV / Basic Pilot Program User Identification Number

\_\_\_\_\_  
BY: Authorized Officer or Agent Date

\_\_\_\_\_  
Print Sub- Contractor Name

\_\_\_\_\_  
Title of Authorized Officer or Agent of Sub-Contractor

\_\_\_\_\_  
Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE  
\_\_\_\_ DAY OF \_\_\_\_\_, 201\_

\_\_\_\_\_  
Notary Public  
My Commission Expires: \_\_\_\_\_

**[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]**

**DISCLOSURE FORM**

This form is for disclosure of campaign contributions and family member relations with CITY officials/employees or Owner's Representative (Collaborative Infrastructure Service employees).

Please complete this form and return as part of your bid package when it is submitted.

Name of Bidder \_\_\_\_\_

Name and the official position of the CITY Official to whom the campaign contribution was made (Please use a separate form for each official to whom a contribution has been made in the past two (2) years.)

\_\_\_\_\_

List the dollar amount/value and description of each campaign contribution made over the past two (2) years by the Applicant/Opponent to the named CITY Official.

Amount/Value

Description

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Please list any family member that is currently (or has been employed within the last 12 months) by the CITY and your relation:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]**

**CERTIFICATION OF SPONSOR DRUG-FREE WORKPLACE**

***I hereby certify that I am a principle and duly authorized representative***

***or*** \_\_\_\_\_

whose address \_\_\_\_\_

and it is also that:

1. The provisions of Section 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the “Drug-Free Workplace Act” have been complied with in full; and,
2. A drug-free workplace will be provided for the sponsor’s employees during the performance or the contract; and,
3. Each subcontractor hired by the SPONSOR shall be required to ensure that the subcontractor’s employees are provided a drug-free workplace. The SPONSOR shall secure from that subcontractor the following written certification: “As part of the subcontracting agreement with \_\_\_\_\_  
\_\_\_\_\_ certifies to the SPONSOR that a drug-free workplace will be provided for the subcontractor’s employees during the performance of this contract pursuant to paragraph (7) of subsection (b) of the Official Code of Georgia Annotated Section 50-24-3; and,
4. It is certified that the undersigned will not engage in unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the contract.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## GENERAL CONDITIONS

Unless otherwise directed, all work performed under this contract shall be in accordance with the Georgia Department of Transportation Standard Specifications, Construction of Transportation Systems (current edition), and Special Provisions modifying them, except as noted below.

### SECTION 101

### DEFINITION AND TERMS

Section 101.14  
COMMISSIONER

Delete as written and substitute the following:  
CITY Manager

Section 101.22  
DEPARTMENT

Delete as written and substitute the following:  
CITY Manager

Section 101.24  
OWNER'S REPRESENTATIVE

Delete as written and substitute the following:  
OWNER'S REPRESENTATIVE

Section 101.84

Add: OWNER'S REPRESENTATIVE

### SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

Section 102.05 EXAMINATION OF PLANS,  
SPECIFICATIONS, SPECIAL PROVISIONS,  
AND SITE OF THE WORK

Add the following paragraph:

“The CITY will not be responsible for Bidders’ errors or misjudgment, nor for any information on local conditions or general laws and regulations.”

Section 102.07 REJECTION OF  
PROPOSALS

Add the following subparagraphs

“I. The CITY reserves the right to reject any and all bids, to waive technicalities, and to make an award as deemed in its best interest. It is understood that all bids are made subject to this Agreement, that the CITY reserves the right to award the bid to the lowest,

responsible Bidder, and in arriving at this decision, full consideration will be given to the reputation of the Bidder, his financial responsibility, and work of this type successfully completed.

“J. The CITY also reserves the right to reject any and all bids from any person, firm, or corporation who is in arrears in any debt or obligation to The CITY, 1055 Rowland Street, Clarkston, GA 30021”

Section 102.08 PROPOSAL  
GUARANTY

Substitute the following for the first sentence

“No bid will be considered unless it is accompanied by an acceptable bid bond an amount not less than five percent (5%) of the amount bid and made payable to CITY. Such Bid Bond shall be on the forms provided by the CITY.”

Add Section 102.15  
ADDENDA AND INTERPRETATION

Delete in its entirety and substitute the following:

Bids shall be submitted on the Bid Form provided by the CITY

The bid package as described in Notice to Contractors, Page 1 must be submitted with the bid. Failure to do so could result in the omission of pertinent documents and the rejection of the apparent low bid.”

Section 102.09  
DELIVERY OF PROPOSALS:

Add the following as 102.15:

“No interpretation of the meaning of the Contract Documents will be made orally to any Bidder. Any request for such interpretation should be in writing addressed to the CITY Manager, The CITY; 1055 Rowland Street, Clarkston, GA 30021. Each such interpretation shall be given in writing, separately numbered and dated, and furnished to each interested Bidder. Any request not received

in time to accomplish such interpretation and distribution will not be accepted.

## SECTION 103

### AWARD OF AWARD AND EXECUTION OF CONTRACT

#### Section 103.02 AWARD OF CONTRACT

Delete in its entirety and substitute the following:

“The contract, if awarded, shall be awarded to the lowest responsible bidder. The CITY reserves the right to exercise exclusive discretion as to the responsibility of any bidder.

The contract shall be executed on the forms attached, will be subject to all requirements of the Contract Document, and shall form a binding Contract between the contracting parties.”

#### Section 103.05 REQUIREMENTS OF CONTRACT BONDS

Delete in its entirety and substitute the following:

“At the time of the execution of the contract, and as a part thereof, the successful bidder shall furnish Contract Bond Below:  
Performance Bond in the full amount of the contract. Payment Bond in the full amount of the contract.”

#### Section 103.07 FAILURE TO EXECUTE CONTRACT

Delete in its entirety and substitute the following:

“Failure to execute the Contract Performance, or Payment Bonds, or furnish satisfactory proof of carriage of the insurance required within ten days after the date of Notice of Award of the Contract, may be just cause for the annulment of the award and for the forfeiture of the proposal guaranty to the CITY, not as a penalty, but as liquidation of damages sustained. At the discretion of the CITY, the award may then be made to the next lowest bidder, may be re-advertised, or may be

constructed by CITY forces. The Contract and Contract bonds shall be executed in quadruplicate.”

## SECTION 107 LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

### Section 107.21 CONTRACTORS

Add the following sentence to Paragraph A:

#### RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICE

“The Contractor is responsible for the location of above and below ground Utilities and structures which may be affected by the Work.”

## SECTION 109

## MEASUREMENT AND PAYMENT

### Section 109.07 PARTIAL PAYMENTS

Delete the first sentence of the Second Paragraph under ‘A. General’

As long as the gross value of completed work is less than 50% of the total Contract amount, or if the Contractor is not maintaining his construction schedule to the satisfaction of the Owner’s Representative, the CITY shall retain 10% of the gross value of the work that has been completed as indicated by the current estimate certified by the Owner’s Representative for payment.

### Section 109.08 FINAL PAYMENT

Delete in its entirety and substitute the following.

“Final Payment: Upon completion by the Contractor of the work, including the receipt

of any final written submission of the Contractor and the approval thereof by the CITY will pay the Contractor a sum equal to 100 percent (100%) of the compensation set forth herein, less the total of all previous partial payments, paid or in the process of payment.

The Contractor agrees that acceptance of this final payment shall be in full and final settlement of all claims arising against the CITY for work done, materials furnished, costs incurred, or otherwise arising out of this Agreement and shall release the CITY from any and all further claims of whatever nature, whether known or unknown for and on account of said Agreement, and for any and all work done, and labor and materials furnished, in connection with same

# **PROJECT WORK SCOPE**

## **PROJECT TITLE**

The City of Clarkston requests interested parties to submit formal sealed bids/proposals for the **SPLOST-05 PEDESTRIAN CROSSWALK IMPROVEMENT – RECTANGULAR RAPID FLASHING BEACON** project.

## **REQUIRED BIDDING DOCUMENTS**

The submitted bid shall be based on the project details described in the following and the required submittals identified in the Bidding Instructions:

1. Bid Schedule of Items - Exhibit A
2. Construction Plans Prepared by CALYX Engineers + Consultants - Exhibit B
3. RRFB Standard Provision – Section 925 – Exhibit C

## **PROJECT DESCRIPTION**

Furnish all labor, materials, and equipment for grading, demolition, utility relocations for the installation of a Rectangular Rapid Flashing Beacon Assembly, crosswalk, sidewalk, signage and related materials

## **SPECIFICATIONS**

Unless otherwise noted, all work associated with this contract shall meet the Georgia DOT standard specifications for construction materials, methods and procedures not specifically listed in this solicitation.

The following are special provisions prepared specifically for this contract and may be in conflict with parts of the standard specifications. If conflicts are evident the special provisions shall take precedence over the standard specifications.

## **PROSECUTION AND PROGRESS**

The CITY desires to have all work completed no later than Sixty (60) calendar days after the issuance of the Notice-To-Proceed by the Owner's Representative.

Construction shall begin no later than 10 calendar days following the Notice to Proceed. The Contractor will mobilize with sufficient forces such that all construction identified as part of this contract shall be substantially completed within the calendar days indicated on the Bid Schedule. Inclement weather days will not count against the available calendar days.

Normal workday for this project shall be 9:00 AM to 4:00 PM and the normal work week shall be

Monday through Friday. The CITY will consider extended workdays or workweeks upon written request by the Contractor on a case by case basis. No work will be allowed on county or state recognized holidays.

The work will require bidder to provide all labor, administrative forces, equipment, materials and other incidental items to complete all required work. The CITY shall perform a Final Inspection upon completion of all work. The Contractor will be allowed to participate in the Final Inspection. All repairs shall be completed by the Contractor at his expense prior to issuance of Final Acceptance. Ten (10%) percent retainage will be held on the final invoice until Final Acceptance of work (completed punch list) is issued by the CITY.

The Contractor shall provide all materials, labor, and equipment necessary to perform the work without delay unto completion.

### **PERMITS AND LICENSES**

The Contractor shall procure all permits and licenses, pay all charges, taxes and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work.

### **OC/OA TESTING OF MATERIALS**

The **Contractor** will be responsible for all quality control testing (concrete sampling and testing to meet GDOT requirements) of materials incorporated into the project. All materials and workmanship shall meet appropriate GDOT specifications. Materials quality control testing types will meet GDOT specifications.

Contractor shall secure the services of a GDOT qualified materials testing firm to perform all required concrete tests. Test results shall be provided to the CITY promptly as the work progresses. All material testing work shall be considered incidental to the rest of the work and no separate payment will be made. One set of five (5) cylinders. Compressive strength of the Class A for the sidewalk shall be GDOT requirements after 28 days.

Contractor will be responsible for replacing any work performed with material from rejected sample lot at no cost to the CITY.

### **DEVIATION OF QUANTITIES**

The quantities given are estimates only and will vary from those indicated. Payment will be made based on actual quantities of work completed and accepted. The CITY reserves the right to add or delete quantities at any time with no alterations in the submitted Unit Price. Contractor will notify the CITY in writing if additional items are identified or quantities of contract items will exceed plan. At no time will contractor proceed with work outside the prescribed scope of services for which additional payment will be requested without the written authorization of the CITY.

### **UTILITIES**

Contractor shall be responsible for the cost and coordination of any utility relocation necessary to the

completion of the work. The cost for easements required for placement of utilities off ROW will not be the responsibility of the contractor.

### **GENERAL CONSTRUCTION GUIDELINES**

1. **The Prime Contractor shall be required to perform a minimum of 60% of the work** included in the Schedule of Items and will not be allowed to sublet this item. All work shall be in accordance with Section 108.01 of the Standard Specifications of the Georgia Department of Transportation and General Provision – Traffic – Section 925 (Exhibit C).
2. The contractor shall be required to give 24 hour notice to the Owner's Representative before proceeding with any work.
3. The contractor shall furnish, install, maintain and remove all necessary traffic signs, barricades, lights, signals, cones and other traffic control devices, and all flagging and other means of traffic protection and guidance as required by the Standard Specifications of the Georgia Department of Transportation. Such work shall be considered incidental to the overall contract, and no additional compensation will be made.
- 4.. Notices shall be dropped off at place of businesses a minimum of 48 hours before work commences. Notices to be provided only to those properties where work abuts the property frontages. Notice to be approved by Owner's Representative before delivery occurs. Notices shall, at a minimum, state the project type, the anticipated start and complete date, name of contractor, use of contractor letterhead and phone number of superintendent.

## SCHEDULE OF EVENTS

### FOR REFERENCE ONLY - DO NOT SUBMIT WITH BID RESPONSE

<b>Event:</b>	<b>Date:</b>
Release of ITB	Tuesday, October 2 <sup>nd</sup> , 2018
Pre-Bid Conference	Pre-Bid Meeting will <b><u>NOT</u></b> be Held
Deadline for Written Questions *	October 19 <sup>th</sup> , 2018; 5:00 PM
City Council Vote	November 6 <sup>th</sup> , 2018
Contract Award (On/about)	November 9 <sup>th</sup> , 2018
Notice to Proceed Issued (On/about)	November 12 <sup>th</sup> , 2018
CITY to post on CITY web site “Response to Questions” and/or Addendum	October 22, 2018; 5:00 PM

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\*Submit questions via email to Larry Kaiser; [kaiser@co-infra-services.com](mailto:kaiser@co-infra-services.com)

### **Bids Due: October 26<sup>th</sup>, 2018 @ 4:00 PM**

Bids are due to: City of Clarkston  
1055 Rowland Street  
Clarkston, GA 30021

**ATTN:** Keith Barker  
**City Manager**

**NOTE:** Hours of operation are from 9:00 AM until 5:00 PM Monday-Friday.

**(BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE)  
EXHIBIT A**

**BID SCHEDULE OF ITEMS** (1 page)

**Contract Scope:** Furnish all labor, materials, and equipment for grading, demolition, utility relocations for the installation of a Rectangular Rapid Flashing Beacon Assembly, crosswalk, sidewalk, signage and related materials

ITEM NOS.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	TOTAL AMOUNT
150-1000	TRAFFIC CONTROL	LS	1		
210-0100	GRADING COMPLETE	LS	1		
310-5060	GR. AGGR BASE CRS, 6 INCH, INCL MATL	TN	7		
441-0104	CONC. SIDEWALK, 4 IN.	SY	31		
441-5004	CONC. HEADER CURB, 10 IN. TP 4	LF	47		
611-5551	RESET SIGN	EA	1		
636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL.SHEETING, TP 9	SF	1.5		
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL.SHEETING, TP 11	SF	51		
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN. WHITE	LF	56		
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF	112		
999-3800A	RECTANGULAR RAPID BEACON ASSEMBLY INSTALLATION NO. 1	LS	1		
				<b>TOTAL BID</b>	

**Print Total Bid Price: (print)** \_\_\_\_\_

In compliance with the attached Specification, the undersigned offers and agrees that if this Bid is accepted, by the CITY within Sixty (60) days of the date of Bid opening, that he will furnish any or all of the Items upon which Prices are quoted, at the Price set opposite each Item, delivered to the designated point(s) within the time specified in the Bid Schedule.

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

AUTHORIZED SIGNATURE \_\_\_\_\_

PRINT / TYPE NAME \_\_\_\_\_

TITLE \_\_\_\_\_

# **EXHIBIT B**

## **CONSTRUCTION PLANS** (available for download from CITY web site)

# **EXHIBIT C**

General Provisions  
Traffic – Section 925

**925.2.50 Rectangular Rapid Flashing Beacon Assembly**

**A. Requirements**

Provide Rectangular Rapid Flashing Beacon Assemblies in the quantities and locations indicated in the Plans. Provide all equipment, materials, and work in accordance with all manufacturers' recommendations, including but not limited to all mounting, wiring and cabling, power supply, surge suppression, and communications equipment and materials.

Ensure all provisions of the MUTCD applicable to Warning Beacons are met except as otherwise provided in this Specification. Product specifications must meet all Georgia Department of Transportation requirements.

RRFB assembly shall consist of the following components: beacons, mounting pole and foundation, wireless subsystem, solar panel subsystem.

1. Rectangular Rapid Flashing Beacon Assembly

Ensure that the individual components and assemblies of the Rectangular Rapid Flashing Beacon Assembly conform to the requirements specified herein.

Ensure that all equipment, materials, components and assemblies of the Rectangular Rapid Flashing Beacon Assembly conform to manufacturer's requirements and recommendations.

Construct the system with all electronic components of solid-state design and modular construction and designed for the environment in which they will be installed.

Deliver the Rectangular Rapid Flashing Beacon Assembly with connectors, fasteners, etc. preventing reversed assembly or installation or where possible malfunction or personnel hazards might occur.

Deliver and install the Rectangular Rapid Flashing Beacon Assembly with any other equipment or components needed for safe and reliable operation.

Ensure the Rectangular Rapid Flashing Beacon Assembly consists of but is not limited to the following components and materials:

- Rectangular Rapid Flashing Beacon Assembly
- Solar cell/battery power source
- Signs
- Wireless subsystem
- Push button activation system
- Mounting Hardware
- Configuration and data collection software
- Installation and testing

Ensure Rectangular Rapid Flashing Beacon Assembly meets the performance requirements listed below:

a. Beacon Dimensions and Placement in Sign Assembly

Contains two rectangular-shaped yellow indications, each with an LED-array based light source. Each indication is a minimum of 5 inches wide by 2 inches high. LEDs face oncoming traffic when installed.

The longer dimensions of the Rectangular Rapid Flashing Beacon indications are aligned horizontally.

The minimum space between the two indications is 7 inches measured from inside edge of one indication to inside edge of the other indication.

The outside edges of Rectangular Rapid Flashing Beacon indications, including any housing, do not

## Section 925—Traffic Signal Equipment

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project beyond the edges of the S1-1 sign.

The Rectangular Rapid Flashing Beacon indications are located between the bottom of the crosswalk warning (S1-1) sign and the top of the supplemental downward diagonal arrow (W16-7p) sign.

### b. Beacon Flashing Requirements

The beacon shall follow the following wig-wag and strobe (WW+S) display pattern:

- A flash cycle length of 800 milliseconds, which results in 75 flash cycles per minute. The 800-millisecond flash cycle shall have the following sequence:
  - **The left side beacon is on for 50 milliseconds**  
Both beacons are off for 50 milliseconds
  - **The right side beacon is on for 50 milliseconds**  
Both beacons are off for 50 milliseconds
  - **The left side beacon is on for 50 milliseconds**  
Both beacons are off for 50 milliseconds
  - **The right side beacon is on for 50 milliseconds**  
Both beacons are off for 50 milliseconds
  - **Both beacons are on for 50 milliseconds**  
Both beacons are off for 50 milliseconds
  - **Both beacons are on for 50 milliseconds**  
Both beacons are off for 250 milliseconds

The flash rate of each individual yellow indication, as applied over the full on-off sequence of a flashing period of the indication, is not between 5 and 30 flashes per second, to avoid frequencies that might cause seizures.

The light intensity of the yellow indications meets minimum specifications of Society of Automotive Engineers (SAE) standard J595 Class I (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005.

### c. Beacon Operation

The Rectangular Rapid Flashing Beacon stays normally dark and initiates operation only when actuated by a pedestrian.

The Rectangular Rapid Flashing Beacon ceases operation at a predetermined time after pedestrian actuation and by passive detection, after the pedestrian clears the crosswalk.

All Rectangular Rapid Flashing Beacons associated with a given crosswalk (including those with an advance crossing sign, if used) simultaneously commence operation of their alternating rapid flashing indications when activated and cease operation simultaneously.

Uses pedestrian pushbuttons to actuate the Rectangular Rapid Flashing Beacons.

Includes a pedestrian instruction sign with the legend PUSH BUTTON TO TURN ON WARNING LIGHTS mounted adjacent to or integral with each pedestrian pushbutton.

The duration of a predetermined period of operation of the Rectangular Rapid Flashing Beacons following each actuation is based on the MUTCD procedures for timing of pedestrian clearance times for pedestrian signals.

Includes a small light directed at and visible to pedestrians in the crosswalk installed integral to the Rectangular Rapid Flashing Beacon or push button to give confirmation that the Rectangular Rapid Flashing Beacon is in operation.

Powered by solar cells and batteries with automatic battery charging and power control.  
Uses wireless communication to avoid trenching.

The Rectangular Rapid Flashing Beacon is visible a minimum distance of 1000 feet during daytime and nighttime.

d. Wireless Subsystem

Frequency in the 900 MHz FHSS or 2.4 GHz range.  
Range: minimum 500’.

e. Solar Panel Subsystem and Batteries

Solar Panel Output: min 20 watt panel or as required by the manufacturer.

Batteries: Batteries shall be sealed and maintenance free with a minimum lifespan of 3 years. Battery type shall be Sealed Valve Regulated Lead Acid Batteries or 12V, 20-40AH Sealed Gel or approved equivalent.

Cabinet (if required): Shall be pole mounted NEMA 4 rated fiberglass cabinet with locking clasps or powder coated aluminum with tamper prove hinged door or approved equivalent.

Solar Panel Mount: pole mount with 60° angle bracket or manufacturer recommended specifications.

2. Mounting Pole and Foundation

Provide a breakaway mounting pole and foundation designed to support the Rectangular Rapid Flashing Beacon and the associated solar panel, batteries and all equipment required to supply a complete Rectangular Rapid Flashing Beacon.

Determine pole foundation dimensions based on the local conditions at the locations indicated in the Plans. Ensure the pole foundation provides a safe and secure mounting of the solar powered Rectangular Rapid Flashing Beacon Assembly.

3. Pedestrian Push Button

ADA Pedestrian push buttons are located perpendicular to signal indication and as required by field conditions.  
ADA Pedestrian push buttons are located 3.5’ (1.05m) above sidewalk or ground level.

Provide the Engineer with plans and drawings illustrating the mounting structure and the installed Rectangular Rapid Flashing Beacon.

**B. Fabrication**

General Provisions 101 through 150

**C. Acceptance**

General Provisions 101 through 150

**D. Materials Warranty**

1. Warranty

Provide to the City Project Engineer all manufacturers’ warranties and guarantees for all Rectangular Rapid Flashing Beacon Assembly equipment and materials.

Ensure that the warranties and guarantees are consistent with those provided as customary trade practices, or as otherwise specified in the Plan, Standards Specifications, Supplemental Specifications or Special Provisions.

## Section 925—Traffic Signal Equipment

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Ensure, and state, that the manufacturer's and supplier's warranties and guarantees are transferrable to the agency or user that is responsible for traffic signal maintenance. And said warranties and guarantees are continuous throughout their duration.

Ensure equipment provided under this specification shall be warranted by the manufacturer to be free from defects in materials and workmanship for a minimum of two years from date of receipt or one year from date of acceptance of installation. The exception is the other materials stated in this specification which have longer warranty durations.

Ensure that the manufacturer will repair any faulty equipment during this period at no charge to the City of Clarkston for parts, labor or shipping to and from factory.

### 2. Support

Provide phone consultations as needed during the warranty period at no cost for any operating and maintenance questions or problems.

### E. Measurement

#### 1. Equipment

- Rectangular Rapid Flashing Beacon Assembly

Rectangular Rapid Flashing Beacon Assemblies are measured per each Rectangular Rapid Flashing Beacon Assembly completed and accepted.

#### 2. Payment

##### 1. Rectangular Rapid Flashing Beacon Assembly

Rectangular Rapid Flashing Beacon Assemblies are paid for at the Contract Unit Price per each. Payment is full compensation for furnishing and installing the Rectangular Rapid Flashing Beacon Assembly.

Payment for Rectangular Rapid Flashing Beacon Assembly is made under:

Item No. 925	Rectangular Rapid Flashing Beacon Assembly	Per Each
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### 925.2.51 Uninterruptible Power System

#### A. Requirements

This specification establishes minimum requirements for an Uninterruptible Power System/Power Conditioner for use with traffic control equipment. The UPS shall include, but not be limited to the following: Electronics module, Integrated Power Interface Module and Battery System.

1. UPS assemblies shall be designed for installation in a roadside enclosure to provide battery backup functionality for traffic control systems, including traffic signal and intelligent transportation system (ITS) devices.
2. The UPS shall include batteries provided by the UPS manufacturer or in accordance with the manufacturer's requirements and GDOT QPL.
3. Loss of utility power, transfer from utility power, and transfer back to utility power must not interfere with normal operation of connected equipment.
4. UPS assemblies used to provide backup power in an ITS cabinet must provide a minimum of 350 watts (at 120VAC) of continuous backup power for a minimum of two hours. UPS assemblies used to provide backup power in a traffic signal controller cabinet must provide a minimum 400 watts (at 120VAC) of continuous power for a minimum of 6.5 hours.
5. The UPS shall regulate frequency to 60 Hz, plus or minus 0.5 Hz, while the UPS is supplying power.
6. All equipment used to keep the intersection signalized must be backed up and protected by the UPS.

## Section 925—Traffic Signal Equipment

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7. Double-conversion UPS must be capable of simultaneously producing fully regenerated and regulated, conditioned, True Sine Wave power and hot standby AC output, and have a minimum operating efficiency of 90%.
8. The UPS shall be designed for outdoor applications in accordance with CALTRANS TEES, UL 1778 and applicable NEMA standards.

The UPS electronics shall consist of:

- Fully software defined, digital signal processor, Power Factor Corrected true online double conversion UPC/UPS (Universal Power Conditioner and Uninterruptable Power Supply)
- 3 stage, temperature compensated battery charger
- Local and remote control of UPS functions
- Local and remote monitoring features

### B. Operation

- a. The unit shall be capable of on-site programming, monitoring, and operation without the use of an external device. (i.e. – portable PC)
- b. The UPC/UPS shall provide continuous, fully conditioned and regulated sinusoidal (AC) power to critical devices in the traffic control cabinet.
- c. The UPC/UPS shall provide a minimum of three sets of normally open (NO) and normally closed (NC) single pole, double throw (SPDT) dry relay contact closures, available on a panel mounted terminal block, rated at a minimum 120V/1A, and labeled so as to identify each. Typical configurations are as follows:
  - a. Energize on switch to battery power
  - b. Energize on low battery life remaining (i.e. 40%)
  - c. Run timer (i.e. Contact closure after 2 hours of operation)
- d. Contact closures shall be annunciated on the front panel by a visual indication, such as a discreet LED or part of a LCD screen.
- e. Operating temperature for the UPC/UPS and the batteries shall be -40°C to +74°C.
- f. Upon loss of utility power the UPS shall insert battery power into the system and return to utility power upon restoration of service.
- g. In the event of UPS failure or battery depletion, connected equipment must be energized automatically upon restoration of utility power.
- h. The battery charging system shall be temperature-compensated and compensate over a range of 2.5 – 4.0 mV/°C per cell. The sensor shall be delivered with 10 feet of wire.
- i. Batteries shall not be recharged when the battery temperature exceeds +50°C + -3°C.
- j. UPC/UPS system shall be 19" rack mountable and compatible with ITS Model 340 cabinets and companion cabinets mounted adjacent and/or attached to an existing traffic control cabinet. An auxiliary generator plug assembly shall be accessible on the exterior of the cabinet. (Battery cabinet spec provided as a special provision)
- k. UPS shall be equipped to prevent malfunction feedback to the cabinet or utility service.
- l. Recharge time for the battery, from protective low cut-off to 80% or more of full capacity shall not exceed twenty (20) hours.
- m. The Bypass switch shall enable removal and replacement of the UPC/UPS without shutting down the traffic control system. The UPC/UPS shall be capable of starting when no utility line service (AC) is available.
- n. The UPC/UPS shall not interfere with the existing traffic control components.
- o. The UPC/UPS shall deliver 120 VAC output, + or – 3% with an AC input between 75 and 155 VAC without discharging the batteries.
- p. The UPC/UPS shall support a generator input without using the batteries.
- q. The unit shall have maximum dimensions of 19 inches in width, 13 inches in depth and 6 inches in height. The unit shall have a maximum weight of 35 pounds.
- r. The unit shall provide the following electrical characteristics:
  - a. Input
    - Nominal voltage, 120 VAC, single phase
    - Frequency, 45 to 65 Hz
    - Maximum current draw, 17 amps
    - Protection breaker, 20 Amps
  - b. Output
    - Nominal voltage, 120 VAC, single phase
    - Power rating: minimum – 1250 VA, 875 Watts
    - Voltage regulation + or – 2% for 100% step load change and from high battery to low battery condition

## Section 925—Traffic Signal Equipment

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- Frequency 50 or 60 Hz (+ or – .25, software selectable)
- Configuration keyed connectors and duplex receptacle
- Overload capability 110% for 10 seconds, 200% for 50 milliseconds

### C. Displays, Controls and Diagnostics

1. The UPC/UPS shall include a display and/or meter to indicate current battery charge status and conditions.
2. Voltmeter standard “banana jacks” (+) and (-) mounted on the front panel to read the exact battery voltage drop at the inverter input.
3. Front panel indicated 0 to 100% battery capacity.
4. Built in TVSS (surge suppression) compliant with IEEE/ANSI C.62.4.
5. Integral system to prevent destructive battery discharge and overcharge.
6. Batteries shall be serviceable from the cabinet and shelf system without the need for specialized tools and/or compartment disassembly.
7. An event counter and total hours run time accessible from the front panel display, resettable by front panel command entry.
8. Manufacturer shall include a set of equipment lists, operation and maintenance manuals, battery data sheets, board level schematic and wiring diagrams of the system.
9. The UPC/UPS system shall provide front panel controls for: Power ON, Cold Start, Alarm Silence, Battery Test, Bypass Breaker, DC/Battery Breaker, Battery Test Points, Auxiliary Temperature Connector and Programming Keypad. The UPC/UPS system shall provide a standard EIA 232 interface using a DB 9 connector for remote monitoring and control of system functions. Remote 75 and 155 VAC without discharging the batteries.
10. The UPC/UPS system shall provide a standard EIA 232 interface using a DB 9 connector for remote monitoring and control of system functions. Remote monitoring and full command and control software and a serial connecting cable shall be provided.
11. A NIC (Network Interface Card) shall be provided and the UPC/UPS firmware shall support SNMP protocol and have standard UPS MIBs onboard. The system shall be capable sending SNMP messages that can be trapped with network monitoring tools such as Orion Network Performance Monitor. Remote monitoring and control shall be accessible via a WEB browser interface.

### D. Battery System

1. Individual batteries shall be:
  - a. 12 volt rating.
  - b. Group 24 maximum case size.
2. Battery string shall consist of a minimum of 6 batteries with a cumulative minimum rated capacity of 240 amp-hours.
3. Batteries shall be deep cycle, sealed prismatic lead-calcium based.
4. AGM/SVRLA (Absorbed Glass Mat/Valve Regulated Lead Acid)
5. Batteries shall provide a connection system that shields the terminal from exposure and accidental shorting.
6. Batteries shall be certified to operate over a temperature range of -40°C to +74°C.
7. Batteries shall be provided with appropriate interconnect wiring and corrosion resistant mounting trays and/or brackets appropriate for the cabinet into which they will be installed.
8. Batteries shall indicate maximum recharge data and recharge cycles.
9. Labels shall be included identifying the date of manufacture. Batteries delivered with a manufacture date older than 6 months will be rejected.
10. Battery Harness
  - a. Battery interconnect wiring shall be via two-part modular harness. The cables shall be protected with abrasion resistant nylon sheathing. The interconnect cables shall connect to the base module via a quick release connector. The connector shall have interlocking pins to prevent battery operation if the batteries are not connected. Battery interconnect harness wiring shall be UL style 1015 CSA TEW or Welded Style Cable or equivalent, or proper wire gauge with respect to design current and sufficient strand count for flexibility.
  - b. Battery construction shall include heavy duty, inter-cell connection for low impedance between cells.

### E. Acceptance

## Section 925—Traffic Signal Equipment

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Each UPC/UPS shall be manufactured in accordance with a manufacturer Quality Assurance program (QA). The QA program shall include Production QA that include statistically controlled routine tests to ensure minimum performance levels of UPC/UPS units built to meet this specification and a documented process of how problems are to be resolved. The manufacturer, or an independent testing lab hired by the manufacturer, shall perform Design Quality Testing when any design change results in any alteration to the circuit configuration or performance characteristics.

### **F. Materials Warranty**

Manufacturers shall provide a two (2) year factory repair warranty for parts and labor on the UPC/UPS from date of acceptance by the City of Clarkston. Batteries shall be warranted for full replacement for the first year and 50% discount off the original purchase price for the second year from date of purchase.