

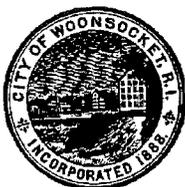
**REQUEST FOR PROPOSAL**

**FOR**

**Police Department Generator – Bid# 5764**

**City of Woonsocket, RI**

**Released on December 7, 2016**



**CITY OF WOONSOCKET, RHODE ISLAND  
REQUEST FOR PROPOSAL FOR:**

**"RFP-POLICE DEPARTMENT GENERATOR"  
BID# 5764 - for the Woonsocket Police Department**

Specifications are available at the Finance Department, **Office of Purchasing**, City of Woonsocket, 169 Main Street, Woonsocket, Rhode Island 02895 between the hours of 8:30 AM and 4:00 PM, Monday through Friday.

Sealed bids will be received by the City of Woonsocket in the Finance Department, Office of Purchasing, City Hall, 169 Main Street, Woonsocket, Rhode Island until **2:00 P.M. on Thursday, January 12, 2017** and then publicly opened and read aloud by the Finance Director in the **Office of Purchasing**, City Hall, 169 Main Street, Woonsocket, Rhode Island at **1:00 P.M.**

**ALL BIDS MUST BE SUBMITTED IN "DUPLICATE COPY" IN A SEALED ENVELOPE PLAINLY MARKED ON THE OUTSIDE OF THE ENVELOPE "POLICE DEPARTMENT GENERATOR".**

**A Certified Check or Bid Bond in the amount of One Thousand Dollars (\$1,000), payable to the City of Woonsocket, must accompany each proposal. The Certified Check or Bid Bonds will be returned to all but the successful bidder upon execution of the contract. The Certified Check or Bid Bond of the successful bidder will be returned upon acceptance of a Performance and Payment bond by the City.**

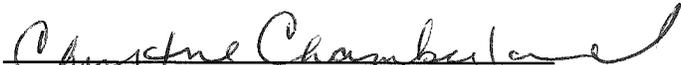
**A Performance and Payment Bond of Twenty Thousand dollars (\$20,000), with a satisfactory surety company, will be required of the successful bidder.**

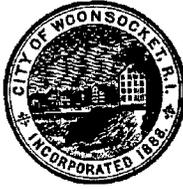
Individuals requesting interpreter services for the hearing impaired should call the Finance Director at 401-762-6400 seventy-two (72) hours in advance of the bid opening.

Responses will be evaluated on the basis of the relative merits of the bid in addition to the price. The City of Woonsocket reserves the right to reject any and all responses, or parts thereof, to waive any irregularity in the responses received and to accept the responses or parts thereof deemed to be most favorable to **THE BEST INTEREST OF THE CITY.**

**Please note the schedule of event dates on the following page.**

Published: December 7, 2016

  
Christine Chamberland, Finance Director



**City Of Woonsocket  
REQUEST FOR PROPOSAL**

**BACKGROUND**

The City of Woonsocket is accepting proposals from experienced Electrical and Emergency power supply companies for Installation and supply of a “complete building backup Generator” for the Woonsocket Police Department Building located at 241 Clinton St.

**SCHEDULE OF EVENTS**

This request for proposal will be governed by the following schedule:

Release of RFP.....	December 7, 2016
Bidder Walkthrough.....	December 14, 2016
Questions are Due.....	December 21, 2016
Answers Distributed.....	December 30, 2016
Proposals are Due.....	January 12, 2017
Proposal Evaluation Completed.....	January 25, 2017
Approval of Contract.....	January 26, 2017
Completion date, on or before.....	May 1, 2017

The Bidder Walkthrough will be conducted at 9:00 AM on, December 14, 2016

The walkthrough is mandatory for submittal of project bid.

## A. PROPOSAL FORMAT GUIDELINES

Interested contractors are to provide the City of Woonsocket with a thorough proposal using the following guidelines:

Proposal should be typed and should contain no more than 20 typed pages using a 12-point font size, including transmittal letter and resumes of key people, but excluding Index/Table of Contents, tables, charts, and graphic exhibits. Each proposal will adhere to the following order and content of sections. Proposal should be straightforward, concise and provide "layman" explanations of technical terms that are used. Emphasis should be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Proposals, which appear unrealistic in the terms of technical commitments, lack of technical competence or are indicative of failure to comprehend the complexity and risk of this contract, may be rejected. The following proposal sections are to be included in the bidder's response:

### A. Vendor Application Form and Cover Letter

Complete Appendix A, "Request for Proposal-Vendor Application Form" and attach this form to the cover letter. A cover letter, not to exceed three pages in length, should summarize key elements of the proposal. An individual authorized to bind the consultant must sign the letter. The letter must stipulate that the proposal price will be valid for a period of at least 180 days. Indicate the address and telephone number of the contractor's office located nearest to Huntington Beach, California and the office from which the project will be managed.

### B. Background and Project Summary Section

The Background and Project Summary Section should describe your understanding of the City, the work to be done, and the objectives to be accomplished. Refer to Scope of Work of this RFP.

### C. Methodology Section

Provide a detailed description of the approach and methodology to be used to accomplish the Scope of Work of this RFP. The Methodology Section should include:

- 1) An implementation plan that describes in detail (i) the methods, including controls by which your firm manages projects of the type sought by this RFP and any other project management or implementation strategies or techniques that the respondent intends to employ in carrying out the work.
- 2) Detailed description of efforts your firm will undertake to achieve client satisfaction and to satisfy the requirements of the "Scope of Work" section.
- 3) Detailed project schedule, identifying all tasks and deliverables to be performed, durations for each task, and overall time of completion.

- 4) Detailed description of specific tasks you will require from City to complete the tasks specified in the Scope of Work.

D. Staffing

Provide a list of individual(s) who will be working on this project and indicate the functions that each will perform. **All onsite personal must pass a background check.**

Upon award and during the contract period, if the contractor chooses to assign different personnel to the project, the Contractor must submit their names and qualifications including information listed above to the City for approval before they begin work.

E. Qualifications

The information requested in this section should describe the qualifications of the firm, key staff and sub-contractors performing projects within the past five years that are similar in size and scope to demonstrate competence to perform these services. Information shall include:

- 1) Names of key staff that participated on named projects and their specific responsibilities with respect to this scope of work.
- 2) A summary of the your firm's demonstrated capability, including length of time that your firm has provided the services being requested in this Request for Proposal.
- 3) Provide at least three local references that received similar services from your firm. The City of Woonsocket reserves the right to contact any of the organizations or individuals listed. Information provided shall include:
  - ◆ Client Name
  - ◆ Project Description
  - ◆ Project start and end dates
  - ◆ Client project manager name, telephone number, and e-mail address

## 5. PROCESS FOR SUBMITTING PROPOSALS

◆ **Content of Proposal**

The proposal must be submitted using the format as indicated in the proposal format guidelines.

◆ **Preparation of Proposal**

Each proposal shall be prepared simply and economically, avoiding the use of elaborate promotional material beyond those sufficient to provide a complete, accurate and reliable presentation.

◆ **Number of Proposals**

Submit four (4) copies plus one disk copy of your proposal in sufficient detail to allow for thorough evaluation and comparative analysis.

◆ **Submission of Proposals**

***Complete written proposals must be submitted in sealed envelopes and received no later than 2:00 p.m. (P.S.T) on January 12, 2017 to the address below. Proposals will not be accepted after this deadline. Faxed or e-mailed proposals will not be accepted.***

**City of Woonsocket  
Finance Dept, Attn: Jessica  
P. O. Box B  
Woonsocket RI, 02895  
Bid# 5764 Police Dept. Generator**

◆ **Inquiries**

***Questions about this RFP must be directed in writing, via e-mail to:***

**Steven Gamache, Superintendent of Fire Alarms  
sgamache@woonsocketri.org**

From the date that this RFP is issued until a firm is selected and the selection is announced, firms are not allowed to communicate for any reason with any City employee other than the contracting officer listed above regarding this RFP, except during the pre-proposal conference. Refer to the Schedule of Events of this RFP or the City of Woonsocket's webpage ([www.woonsocketri.org](http://www.woonsocketri.org)) to determine if a pre-proposal conference has been scheduled. The City reserves the right to reject any proposal for violation of this provision. No questions other than written will be accepted, and no response other than written will be binding upon the City.

◆ **Conditions for Proposal Acceptance**

This RFP does not commit the City to award a contract or to pay any costs incurred for any services. The City, at its sole discretion, reserves the right to accept or reject any or all proposals received as a result of this RFP, to negotiate with any qualified source, or to cancel this RFP in part or in its entirety. All proposals will become the property of the City of Woonsocket, RI. If any proprietary information is contained in the proposal, it should be clearly identified.

## 6. EVALUATION CRITERIA

The City's consultant evaluation and selection process is based upon Qualifications Based Selection (QBS) for professional services. The City of Woonsocket may use some or all of the following criteria in its evaluation and comparison of proposals submitted. The criteria listed are not necessarily an all-inclusive list. The order in which they appear is not intended to indicate their relative importance:

- A. Compliance with RFP requirements
- B. Understanding of the project
- C. Recent experience in conducting similar scope, complexity, and magnitude for other public agencies
- D. Educational background, work experience, and directly related consulting experiences
- E. Price
- F. References

The City may also contact and evaluate the bidder's and subcontractor's references; contact any bidder to clarify any response; contact any current users of a bidder's services; solicit information from any available source concerning any aspect of a proposal; and seek and review any other information deemed pertinent to the evaluation process. The evaluation committee shall not be obligated to accept the lowest priced proposal, but shall make an award in the best interests of the City.

After written proposals have been reviewed, discussions with prospective firms may or may not be required. If scheduled, the oral interview will be a question/answer format for the purpose of clarifying the intent of any portions of the proposal. The individual from your firm that will be directly responsible for carrying out the contract, if awarded, should be present at the oral interview.

A Notification of Intent to Award may be sent to the vendor selected. Award is contingent upon the successful negotiation of final contract terms. Negotiations shall be confidential and not subject to disclosure to competing vendors unless an agreement is reached. If contract negotiations cannot be concluded successfully, the City may negotiate a contract with the next highest scoring vendor or withdraw the RFP.

## 7. STANDARD TERMS AND CONDITIONS

- ◆ Amendments

The City reserves the right to amend this RFP prior to the proposal due date. All amendments and additional information will be posted to the City of Woonsocket web site, bidders should check this web page daily for new information.

- ◆ Cost for Preparing Proposal

The cost for developing the proposal is the sole responsibility of the bidder. All proposals submitted become the property of the City.

◆ Contract Discussions

Prior to award, the apparent successful firm may be required to enter into discussions with the City to resolve any contractual differences. These discussions are to be finalized and all exceptions resolved within one (1) week from notification. If no resolution is reached, the proposal may be rejected and discussions will be initiated with the second highest scoring firm. See Exhibit B for a sample agreement.

◆ Confidentiality Requirements

The staff members assigned to this project may be required to sign a departmental non-disclosure statement. Proposals are subject to the Freedom of Information Act. The City cannot protect proprietary data submitted in proposals.

◆ Financial Information

The City is concerned about bidders' financial capability to perform, therefore, may ask you to provide sufficient data to allow for an evaluation of your firm's financial capabilities.

◆ Insurance Requirements

City requires that licensees, lessees, and vendors have an **approved** Certificate of Insurance (not a declaration or policy) on file with the City for the issuance of a permit or contract. Within ten (10) consecutive calendar days of award of contract, successful bidder must furnish the City with the Certificates of Insurance proving coverage. Failure to furnish the required certificates within the time allowed will result in forfeiture of the Proposal Security.

***Please carefully review the Sample Agreement and Insurance Requirements before responding to the Request for Proposal enclosed herein. The terms of the agreement, including insurance requirements have been mandated by City Council and can be modified only if extraordinary circumstances exist. Your response to the Request for Proposal must indicate if you are unwilling or unable to execute the agreement as drafted as well as providing the insurance requirements. The City will consider this in determining responsiveness to the Request for Proposal.***

**REQUEST FOR PROPOSAL**  
**VENDOR APPLICATION FORM**

TYPE OF APPLICANT:      NEW                    CURRENT VENDOR

Legal Contractual Name of Corporation: \_\_\_\_\_

Contact Person for Agreement: \_\_\_\_\_

Corporate Mailing Address: \_\_\_\_\_

City, State and Zip Code: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Contact Person for Proposals: \_\_\_\_\_

Title: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Business Telephone: \_\_\_\_\_ Business Fax: \_\_\_\_\_

Is your business: (check one)

- NON PROFIT CORPORATION            FOR PROFIT CORPORATION

Is your business: (check one)

- CORPORATION                            LIMITED LIABILITY PARTNERSHIP
- INDIVIDUAL                            SOLE PROPRIETORSHIP
- PARTNERSHIP                            UNINCORPORATED ASSOCIATION

Names & Titles of Corporate Board Members

(Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names

Title

Phone


Federal Tax Identification Number: \_\_\_\_\_

**APPENDIX B**

PROFESSIONAL SERVICES CONTRACT BETWEEN  
THE CITY OF WOOSOCKET AND

FOR

---

THIS AGREEMENT (“Agreement”) is made and entered into by and between the City of Woonsocket hereinafter

referred to as “CITY, and \_\_\_\_\_, a \_\_\_\_\_

hereinafter referred to as “CONTRACTOR.”

WHEREAS, CITY desires to engage the services of a CONTRACTOR to

\_\_\_\_\_ ; and Pursuant to

documentation on file in the office of the City Clerk, the provisions of the City of

Woonsocket, to procurement of professional service contracts have been complied with; and

CONTRACTOR has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONTRACTOR as follows:

1. **SCOPE OF SERVICES**

CONTRACTOR shall provide all services as described in **Exhibit “A,”** which is attached hereto

and Incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the “PROJECT.”

CONTRACTOR hereby designates \_\_\_\_\_ who shall represent it and be its

sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. **CITY STAFF ASSISTANCE**

CITY shall assign a staff coordinator to work directly with CONTRACTOR in the performance of this Agreement.

3. **TERM; TIME OF PERFORMANCE**

Time is of the essence of this Agreement. The services of CONTRACTOR are to commence on \_\_\_\_\_, 20\_\_\_\_ (the "Commencement Date").

. All tasks specified in **Exhibit "A"** shall be completed no later than \_\_\_\_\_.

The time for performance of the tasks identified in **Exhibit "A"** are generally to be shown in **Exhibit "A."** This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONTRACTOR.

In the event the Commencement Date precedes the Effective Date, CONTRACTOR shall be bound by all terms and conditions as provided herein.

4. **COMPENSATION**

In consideration of the performance of the services described herein, CITY agrees to pay CONTRACTOR on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed \_\_\_\_\_ Dollars (\$\_\_\_\_\_).

5. **EXTRA WORK**

In the event CITY requires additional services not included in **Exhibit "A"** or changes in the scope of services described in **Exhibit "A,"** CONTRACTOR will undertake such work only after receiving written authorization from CITY. Additional compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

6. **METHOD OF PAYMENT**

CONTRACTOR shall be paid pursuant to the terms of **Exhibit "B."**

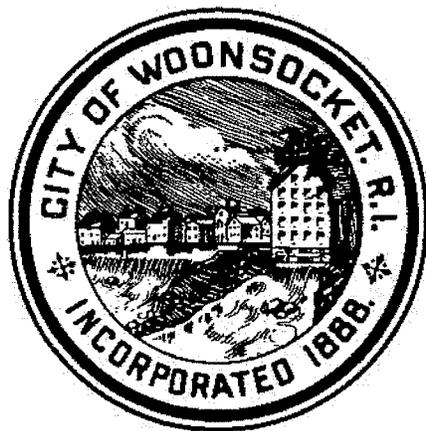
7. **DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS**

CONTRACTOR

agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONTRACTOR shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

8. **HOLD HARMLESS**

CONTRACTOR hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONTRACTOR 's (or CONTRACTOR's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONTRACTOR, its officers, agents or employees accept such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONTRACTOR will conduct all defense at its sole cost and expense and CITY shall approve selection of CONTRACTOR 's counsel. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONTRACTOR.



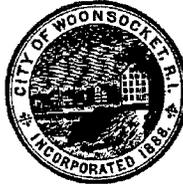
**REQUEST FOR PROPOSAL**

**FOR**

**Police Department Generator – Bid# 5764**

**City of Woonsocket, RI**

**Released on December 7, 2016**



**CITY OF WOONSOCKET, RHODE ISLAND  
REQUEST FOR PROPOSAL FOR:**

**"RFP-POLICE DEPARTMENT GENERATOR"  
BID# 5764 - for the Woonsocket Police Department**

Specifications are available at the Finance Department, **Office of Purchasing**, City of Woonsocket, 169 Main Street, Woonsocket, Rhode Island 02895 between the hours of 8:30 AM and 4:00 PM, Monday through Friday.

Sealed bids will be received by the City of Woonsocket in the Finance Department, Office of Purchasing, City Hall, 169 Main Street, Woonsocket, Rhode Island until **2:00 P.M. on Thursday, January 12, 2017** and then publicly opened and read aloud by the Finance Director in the **Office of Purchasing**, City Hall, 169 Main Street, Woonsocket, Rhode Island at **1:00 P.M.**

**ALL BIDS MUST BE SUBMITTED IN "DUPLICATE COPY" IN A SEALED ENVELOPE PLAINLY MARKED ON THE OUTSIDE OF THE ENVELOPE "POLICE DEPARTMENT GENERATOR".**

**A Certified Check or Bid Bond in the amount of One Thousand Dollars (\$1,000), payable to the City of Woonsocket, must accompany each proposal. The Certified Check or Bid Bonds will be returned to all but the successful bidder upon execution of the contract. The Certified Check or Bid Bond of the successful bidder will be returned upon acceptance of a Performance and Payment bond by the City.**

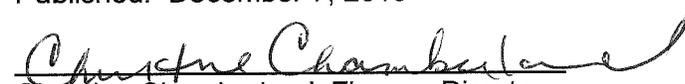
**A Performance and Payment Bond of Twenty Thousand dollars (\$20,000), with a satisfactory surety company, will be required of the successful bidder.**

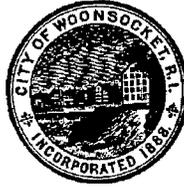
Individuals requesting interpreter services for the hearing impaired should call the Finance Director at 401-762-6400 seventy-two (72) hours in advance of the bid opening.

Responses will be evaluated on the basis of the relative merits of the bid in addition to the price. The City of Woonsocket reserves the right to reject any and all responses, or parts thereof, to waive any irregularity in the responses received and to accept the responses or parts thereof deemed to be most favorable to **THE BEST INTEREST OF THE CITY.**

**Please note the schedule of event dates on the following page.**

Published: December 7, 2016

  
Christine Chamberland, Finance Director



**City Of Woonsocket  
REQUEST FOR PROPOSAL**

**BACKGROUND**

The City of Woonsocket is accepting proposals from experienced Electrical and Emergency power supply companies for Installation and supply of a "complete building backup Generator" for the Woonsocket Police Department Building located at 241 Clinton St.

**SCHEDULE OF EVENTS**

This request for proposal will be governed by the following schedule:

Release of RFP.....	December 7, 2016
Bidder Walkthrough.....	December 14, 2016
Questions are Due.....	December 21, 2016
Answers Distributed.....	December 30, 2016
Proposals are Due.....	January 12, 2017
Proposal Evaluation Completed.....	January 25, 2017
Approval of Contract.....	January 26, 2017
Completion date, on or before.....	May 1, 2017

The Bidder Walkthrough will be conducted at 9:00 AM on, December 14, 2016

The walkthrough is mandatory for submittal of project bid.

## A. PROPOSAL FORMAT GUIDELINES

Interested contractors are to provide the City of Woonsocket with a thorough proposal using the following guidelines:

Proposal should be typed and should contain no more than 20 typed pages using a 12-point font size, including transmittal letter and resumes of key people, but excluding Index/Table of Contents, tables, charts, and graphic exhibits. Each proposal will adhere to the following order and content of sections. Proposal should be straightforward, concise and provide "layman" explanations of technical terms that are used. Emphasis should be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Proposals, which appear unrealistic in the terms of technical commitments, lack of technical competence or are indicative of failure to comprehend the complexity and risk of this contract, may be rejected. The following proposal sections are to be included in the bidder's response:

### A. Vendor Application Form and Cover Letter

Complete Appendix A, "Request for Proposal-Vendor Application Form" and attach this form to the cover letter. A cover letter, not to exceed three pages in length, should summarize key elements of the proposal. An individual authorized to bind the consultant must sign the letter. The letter must stipulate that the proposal price will be valid for a period of at least 180 days. Indicate the address and telephone number of the contractor's office located nearest to Huntington Beach, California and the office from which the project will be managed.

### B. Background and Project Summary Section

The Background and Project Summary Section should describe your understanding of the City, the work to be done, and the objectives to be accomplished. Refer to Scope of Work of this RFP.

### C. Methodology Section

Provide a detailed description of the approach and methodology to be used to accomplish the Scope of Work of this RFP. The Methodology Section should include:

- 1) An implementation plan that describes in detail (i) the methods, including controls by which your firm manages projects of the type sought by this RFP and any other project management or implementation strategies or techniques that the respondent intends to employ in carrying out the work.
- 2) Detailed description of efforts your firm will undertake to achieve client satisfaction and to satisfy the requirements of the "Scope of Work" section.
- 3) Detailed project schedule, identifying all tasks and deliverables to be performed, durations for each task, and overall time of completion.

- 4) Detailed description of specific tasks you will require from City to complete the tasks specified in the Scope of Work.

D. Staffing

Provide a list of individual(s) who will be working on this project and indicate the functions that each will perform. **All onsite personal must pass a background check.**

Upon award and during the contract period, if the contractor chooses to assign different personnel to the project, the Contractor must submit their names and qualifications including information listed above to the City for approval before they begin work.

E. Qualifications

The information requested in this section should describe the qualifications of the firm, key staff and sub-contractors performing projects within the past five years that are similar in size and scope to demonstrate competence to perform these services. Information shall include:

- 1) Names of key staff that participated on named projects and their specific responsibilities with respect to this scope of work.
- 2) A summary of the your firm's demonstrated capability, including length of time that your firm has provided the services being requested in this Request for Proposal.
- 3) Provide at least three local references that received similar services from your firm. The City of Woonsocket reserves the right to contact any of the organizations or individuals listed. Information provided shall include:
  - ◆ Client Name
  - ◆ Project Description
  - ◆ Project start and end dates
  - ◆ Client project manager name, telephone number, and e-mail address

## 5. PROCESS FOR SUBMITTING PROPOSALS

- ◆ **Content of Proposal**  
The proposal must be submitted using the format as indicated in the proposal format guidelines.
- ◆ **Preparation of Proposal**  
Each proposal shall be prepared simply and economically, avoiding the use of elaborate promotional material beyond those sufficient to provide a complete, accurate and reliable presentation.
- ◆ **Number of Proposals**

Submit four (4) copies plus one disk copy of your proposal in sufficient detail to allow for thorough evaluation and comparative analysis.

◆ **Submission of Proposals**

***Complete written proposals must be submitted in sealed envelopes and received no later than 2:00 p.m. (P.S.T) on January 12, 2017 to the address below. Proposals will not be accepted after this deadline. Faxed or e-mailed proposals will not be accepted.***

**City of Woonsocket  
Finance Dept, Attn: Jessica  
P. O. Box B  
Woonsocket RI, 02895  
Bid# 5764 Police Dept. Generator**

◆ **Inquiries**

***Questions about this RFP must be directed in writing, via e-mail to:***

**Steven Gamache, Superintendent of Fire Alarms  
sgamache@woonsocketri.org**

From the date that this RFP is issued until a firm is selected and the selection is announced, firms are not allowed to communicate for any reason with any City employee other than the contracting officer listed above regarding this RFP, except during the pre-proposal conference. Refer to the Schedule of Events of this RFP or the City of Woonsocket's webpage ([www.woonsocketri.org](http://www.woonsocketri.org)) to determine if a pre-proposal conference has been scheduled. The City reserves the right to reject any proposal for violation of this provision. No questions other than written will be accepted, and no response other than written will be binding upon the City.

◆ **Conditions for Proposal Acceptance**

This RFP does not commit the City to award a contract or to pay any costs incurred for any services. The City, at its sole discretion, reserves the right to accept or reject any or all proposals received as a result of this RFP, to negotiate with any qualified source, or to cancel this RFP in part or in its entirety. All proposals will become the property of the City of Woonsocket, RI. If any proprietary information is contained in the proposal, it should be clearly identified.

## 6. EVALUATION CRITERIA

The City's consultant evaluation and selection process is based upon Qualifications Based Selection (QBS) for professional services. The City of Woonsocket may use some or all of the following criteria in its evaluation and comparison of proposals submitted. The criteria listed are not necessarily an all-inclusive list. The order in which they appear is not intended to indicate their relative importance:

- A. Compliance with RFP requirements
- B. Understanding of the project
- C. Recent experience in conducting similar scope, complexity, and magnitude for other public agencies
- D. Educational background, work experience, and directly related consulting experiences
- E. Price
- F. References

The City may also contact and evaluate the bidder's and subcontractor's references; contact any bidder to clarify any response; contact any current users of a bidder's services; solicit information from any available source concerning any aspect of a proposal; and seek and review any other information deemed pertinent to the evaluation process. The evaluation committee shall not be obligated to accept the lowest priced proposal, but shall make an award in the best interests of the City.

After written proposals have been reviewed, discussions with prospective firms may or may not be required. If scheduled, the oral interview will be a question/answer format for the purpose of clarifying the intent of any portions of the proposal. The individual from your firm that will be directly responsible for carrying out the contract, if awarded, should be present at the oral interview.

A Notification of Intent to Award may be sent to the vendor selected. Award is contingent upon the successful negotiation of final contract terms. Negotiations shall be confidential and not subject to disclosure to competing vendors unless an agreement is reached. If contract negotiations cannot be concluded successfully, the City may negotiate a contract with the next highest scoring vendor or withdraw the RFP.

## 7. STANDARD TERMS AND CONDITIONS

- ◆ Amendments  
The City reserves the right to amend this RFP prior to the proposal due date. All amendments and additional information will be posted to the City of Woonsocket web site, bidders should check this web page daily for new information.
- ◆ Cost for Preparing Proposal  
The cost for developing the proposal is the sole responsibility of the bidder. All proposals submitted become the property of the City.

◆ Contract Discussions

Prior to award, the apparent successful firm may be required to enter into discussions with the City to resolve any contractual differences. These discussions are to be finalized and all exceptions resolved within one (1) week from notification. If no resolution is reached, the proposal may be rejected and discussions will be initiated with the second highest scoring firm. See Exhibit B for a sample agreement.

◆ Confidentiality Requirements

The staff members assigned to this project may be required to sign a departmental non-disclosure statement. Proposals are subject to the Freedom of Information Act. The City cannot protect proprietary data submitted in proposals.

◆ Financial Information

The City is concerned about bidders' financial capability to perform, therefore, may ask you to provide sufficient data to allow for an evaluation of your firm's financial capabilities.

◆ Insurance Requirements

City requires that licensees, lessees, and vendors have an **approved** Certificate of Insurance (not a declaration or policy) on file with the City for the issuance of a permit or contract. Within ten (10) consecutive calendar days of award of contract, successful bidder must furnish the City with the Certificates of Insurance proving coverage. Failure to furnish the required certificates within the time allowed will result in forfeiture of the Proposal Security.

***Please carefully review the Sample Agreement and Insurance Requirements before responding to the Request for Proposal enclosed herein. The terms of the agreement, including insurance requirements have been mandated by City Council and can be modified only if extraordinary circumstances exist. Your response to the Request for Proposal must indicate if you are unwilling or unable to execute the agreement as drafted as well as providing the insurance requirements. The City will consider this in determining responsiveness to the Request for Proposal.***

**REQUEST FOR PROPOSAL**  
**VENDOR APPLICATION FORM**

TYPE OF APPLICANT:      NEW                    CURRENT VENDOR

Legal Contractual Name of Corporation: \_\_\_\_\_

Contact Person for Agreement: \_\_\_\_\_

Corporate Mailing Address: \_\_\_\_\_

City, State and Zip Code: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Contact Person for Proposals: \_\_\_\_\_

Title: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Business Telephone: \_\_\_\_\_ Business Fax: \_\_\_\_\_

Is your business: (check one)

- NON PROFIT CORPORATION            FOR PROFIT CORPORATION

Is your business: (check one)

- CORPORATION                            LIMITED LIABILITY PARTNERSHIP
- INDIVIDUAL                            SOLE PROPRIETORSHIP
- PARTNERSHIP                            UNINCORPORATED ASSOCIATION

Names & Titles of Corporate Board Members  
(Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names	Title	Phone

Federal Tax Identification Number: \_\_\_\_\_

**APPENDIX B**

PROFESSIONAL SERVICES CONTRACT BETWEEN  
THE CITY OF WOOSOCKET AND

FOR

---

THIS AGREEMENT (“Agreement”) is made and entered into by and between the City of Woonsocket hereinafter

referred to as “CITY, and \_\_\_\_\_, a \_\_\_\_\_

hereinafter referred to as “CONTRACTOR.”

WHEREAS, CITY desires to engage the services of a CONTRACTOR to

\_\_\_\_\_ ; and Pursuant to

documentation on file in the office of the City Clerk, the provisions of the City of

Woonsocket, to procurement of professional service contracts have been complied with; and

CONTRACTOR has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONTRACTOR as follows:

1. **SCOPE OF SERVICES**

CONTRACTOR shall provide all services as described in **Exhibit “A,”** which is attached hereto

and Incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the “PROJECT.”

CONTRACTOR hereby designates \_\_\_\_\_ who shall represent it and be its

sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. **CITY STAFF ASSISTANCE**

CITY shall assign a staff coordinator to work directly with CONTRACTOR in the performance of this Agreement.

3. **TERM; TIME OF PERFORMANCE**

Time is of the essence of this Agreement. The services of CONTRACTOR are to commence on \_\_\_\_\_, 20\_\_\_\_ (the "Commencement Date").

. All tasks specified in **Exhibit "A"** shall be completed no later than \_\_\_\_\_.

The time for performance of the tasks identified in **Exhibit "A"** are generally to be shown in **Exhibit "A."** This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONTRACTOR.

In the event the Commencement Date precedes the Effective Date, CONTRACTOR shall be bound by all terms and conditions as provided herein.

4. **COMPENSATION**

In consideration of the performance of the services described herein, CITY agrees to pay CONTRACTOR on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed \_\_\_\_\_ Dollars (\$ \_\_\_\_\_).

5. **EXTRA WORK**

In the event CITY requires additional services not included in **Exhibit "A"** or changes in the scope of services described in **Exhibit "A,"** CONTRACTOR will undertake such work only after receiving written authorization from CITY. Additional compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

6. **METHOD OF PAYMENT**

CONTRACTOR shall be paid pursuant to the terms of **Exhibit "B."**

7. **DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS**

CONTRACTOR

agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONTRACTOR shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

8. **HOLD HARMLESS**

CONTRACTOR hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONTRACTOR 's (or CONTRACTOR's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONTRACTOR, its officers, agents or employees accept such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONTRACTOR will conduct all defense at its sole cost and expense and CITY shall approve selection of CONTRACTOR 's counsel. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONTRACTOR.

9. **PROFESSIONAL LIABILITY INSURANCE**

CONTRACTOR shall obtain and furnish to CITY a professional liability insurance policy covering the work performed by it hereunder. This policy shall provide coverage for CONTRACTOR's professional liability in an amount not less than One Million Dollars (\$1,000,000.00) per occurrence and in the aggregate. The above-mentioned insurance shall not contain a self-insured retention without the express written consent of CITY; however an insurance policy "deductible" of Ten Thousand Dollars (\$10,000.00) or less is permitted. A claims-made policy shall be acceptable if the policy further provides that:

- A. The policy retroactive date coincides with or precedes the initiation of the scope of work (including subsequent policies purchased as renewals or replacements).
- B. CONTRACTOR shall notify CITY of circumstances or incidents that might give rise to future claims.

CONTRACTOR will make every effort to maintain similar insurance during the required extended period of coverage following PROJECT completion. If insurance is terminated for any reason, CONTRACTOR agrees to purchase an extended reporting provision

If CONTRACTOR fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the CITY with required proof that insurance has been procured and is in force and paid for, the CITY shall have the right, at the CITY's election, to forthwith terminate this Agreement. Such termination shall not effect CONTRACTOR's right to be paid for its time and materials expended prior to notification of termination. CONTRACTOR waives the right to receive compensation and agrees to indemnify the CITY for any work performed prior to approval of insurance by the CITY.

10. **CERTIFICATE OF INSURANCE**

Prior to commencing performance of the work hereunder, CONTRACTOR shall furnish to CITY a certificate of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverage as required by this Agreement; the certificate shall:

- A. provide the name and policy number of each carrier and policy;
- B. state that the policy is currently in force; and
- C. shall promise that such policy shall not be suspended, voided or canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice; however, ten (10) days' prior written notice in the event of cancellation for nonpayment of premium.

CONTRACTOR shall maintain the foregoing insurance coverage in force until the work under this Agreement is fully completed and accepted by CITY. The requirement for carrying the foregoing insurance coverage shall not derogate from CONTRACTOR 's defense, hold harmless and indemnification obligations as set forth in this Agreement. CITY or its representative shall at all times have the right demand the original or a copy of the policy of insurance

CONTRACTOR shall pay, in a prompt and timely manner, the premiums on the insurance hereinabove required.

11. **INDEPENDENT CONTRACTOR**

CONTRACTOR is, and shall be, acting at all times in the performance of this Agreement as an independent contractor herein and not as an employee of CITY.

CONTRACTOR shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for CONTRACTOR and its officers, agents and employees and all business licenses, if any, in connection with the PROJECT and/or the services to be performed hereunder.

12. **TERMINATION OF AGREEMENT**

All work required hereunder shall be performed in a good and workmanlike manner. CITY may terminate CONTRACTOR 's services hereunder at any time with or without cause, and whether or not the PROJECT is fully complete. Any termination of this Agreement by CITY shall be made in writing, notice of which shall be delivered to CONTRACTOR as provided herein. In the event of termination, all finished and unfinished documents, exhibits, report, and evidence shall, at the option of CITY, become its property and shall be promptly delivered to it by CONTRACTOR.

13. **ASSIGNMENT AND DELEGATION**

This Agreement is a personal service contract and the work hereunder shall not be assigned, delegated or subcontracted by CONTRACTOR to any other person or entity without the prior express written consent of CITY. If an assignment, delegation or subcontract is approved, all approved assignees, delegates and subcontractors must satisfy the insurance requirements as set forth in Sections 9 and 10 hereinabove.

14. **COPYRIGHTS/PATENTS**

CITY shall own all rights to any patent or copyright on any work, item or material produced as a result of this Agreement.

15. **CITY EMPLOYEES AND OFFICIALS**

CONTRACTOR shall employ no CITY official nor any regular CITY employee in the work performed pursuant to this Agreement. No officer or employee of CITY shall have any financial interest in this Agreement .

16. **NOTICES**

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONTRACTOR 's agent (as designated in Section 1 herein above) or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONTRACTOR may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

TO CITY:

TO CONTRACTOR:

City of Woonsocket

ATTN:   Jessica  

169 Main Street

Woonsocket, RI 02895

17. **CONSENT**

When CITY's consent/approval is required under this Agreement, its consent/approval for one transaction or event shall not be deemed to be a consent/approval to any subsequent occurrence of the same or any other transaction or event.

18. **MODIFICATION**

No waiver or modification of any language in this Agreement shall be valid unless in writing and duly executed by both parties.

19. **SECTION HEADINGS**

The titles, captions, section, paragraph and subject headings, and descriptive phrases at the beginning of the various sections in this Agreement are merely descriptive and are included solely for convenience of reference only and are not representative of matters included or excluded from such provisions, and do not interpret, define, limit or describe, or construe the intent of the parties or affect the construction or interpretation of any provision of this Agreement.

20. **INTERPRETATION OF THIS AGREEMENT**

The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against any of the parties. If any provision of this Agreement is held by an arbitrator or court of competent jurisdiction to be unenforceable, void, illegal or invalid, such holding shall not invalidate or affect the remaining covenants and provisions of this Agreement. No covenant or provision shall be deemed dependent upon any other unless so expressly provided here. As used in this Agreement, the masculine or neuter gender and singular or plural number shall be deemed to include the other whenever the context so indicates or requires. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provision contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no right to contract, then the latter shall prevail, and the provision of this Agreement which is hereby affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

21. **DUPLICATE ORIGINAL**

The original of this Agreement and one or more copies hereto have been prepared and signed in counterparts as duplicate originals, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original. Each duplicate original shall be deemed an original instrument as against any party who has signed it.

22. **IMMIGRATION**

CONTRACTOR shall be responsible for full compliance with the immigration and naturalization laws of the United States and shall, in particular, comply with the provisions of the United States Code regarding employment verification.

23. **LEGAL SERVICES SUBCONTRACTING PROHIBITED**

CONTRACTOR and CITY agree that CITY is not liable for payment of any subcontractor work involving legal services, and that such legal services are expressly outside the scope of services contemplated hereunder. CITY shall not be liable for payment of any legal services expenses incurred by CONTRACTOR.

24. **ATTORNEY'S FEES**

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the nonprevailing party.

25. **SURVIVAL**

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

26. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of Rhode Island.

27. SIGNATORIES

Each undersigned represents and warrants that its signature herein below has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify CITY fully for any injuries or damages to CITY in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

**CONTRACTOR's initials** \_\_\_\_\_

28. ENTIRETY

The parties acknowledge and agree that they are entering into this Agreement freely and voluntarily following extensive arm's length negotiation, and that each has had the opportunity to consult with legal counsel prior to executing this Agreement. The parties also acknowledge and agree that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by that party or anyone acting on that party's behalf, which are not embodied in this Agreement, and that that party has not executed this Agreement in reliance on any representation, inducement, promise, agreement, warranty, fact or circumstance not expressly set forth in this Agreement. This Agreement, and the attached exhibits, contain the entire agreement between the parties respecting the subject matter of this Agreement, and supersede all prior understandings and agreements whether oral or in writing between the parties respecting the subject matter hereof.

29. EFFECTIVE DATE

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers. This Agreement shall be effective on the date of its. This Agreement shall expire when terminated as provided herein.

CONTRACTOR,

\_\_\_\_\_  
COMPANY NAME  
\_\_\_\_\_

CITY OF Woonsocket, a municipal  
of the State of Rhode Island

By: \_\_\_\_\_

\_\_\_\_\_  
print name

**ITS:** (circle one) Chairman/President/Vice President

**AND**

By: \_\_\_\_\_

\_\_\_\_\_  
print name

**ITS:** (circle one) Secretary/Chief Financial Officer/Asst.  
Secretary - Treasurer

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk

INITIATED AND APPROVED:

\_\_\_\_\_

\_\_\_\_\_  
Director/Chief

REVIEWED AND APPROVED:

\_\_\_\_\_  
City Administrator

APPROVED AS TO FORM:

\_\_\_\_\_

City Attorney

## **EXHIBIT "A"**

A. STATEMENT OF WORK: (Narrative of work to be performed)

B. CONTRACTOR 'S DUTIES AND RESPONSIBILITIES:

1.

2.

C. CITY'S DUTIES AND RESPONSIBILITIES:

1.

2.

D. WORK PROGRAM/PROJECT SCHEDULE:

EXHIBIT A

## EXHIBIT "B"

### Payment Schedule (Hourly Payment)

A. **Hourly Rate**

CONTRACTOR'S fees for such services shall be based upon the following hourly rate and cost schedule:

B. **Travel** Charges for time during travel are not reimbursable.

C. **Billing**

1. All billing shall be done monthly.
2. Each month's bill should include a total to date. That total should provide, at a glance, the total fees and costs incurred to date for the project.
3. A copy of memoranda, letters, reports, calculations and other documentation prepared by CONTRACTOR may be required to be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.
4. CONTRACTOR shall submit to CITY an invoice for each monthly payment due. Such invoice shall:
  - A) Reference this Agreement;
  - B) Describe the services performed;
  - C) Show the total amount of the payment due;
  - D) Include a certification by a principal member of CONTRACTOR's firm that the work has been performed in accordance with the provisions of this Agreement; and
  - E) For all payments include an estimate of the percentage of work completed.

Upon submission of any such invoice, if CITY is satisfied that CONTRACTOR is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONTRACTOR in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONTRACTOR is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

5. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.

## EXHIBIT "B"

### Payment Schedule (Fixed Fee Payment)

1. CONTRACTOR shall be entitled to monthly progress payments toward the fixed fee set forth herein in accordance with the following progress and payment schedules.
2. Delivery of work product: A copy of every memorandum, letter, report, calculation and other documentation prepared by CONTRACTOR shall be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.
3. CONTRACTOR shall submit to CITY an invoice for each monthly progress payment due. Such invoice shall:
  - A) Reference this Agreement;
  - B) Describe the services performed;
  - C) Show the total amount of the payment due;
  - D) Include a certification by a principal member of CONTRACTOR 's firm that the Work has been performed in accordance with the provisions of this Agreement; and
  - E) For all payments include an estimate of the percentage of work completed.

Upon submission of any such invoice, if CITY is satisfied that CONTRACTOR is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONTRACTOR in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONTRACTOR is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

4. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.

PROFESSIONAL SERVICES CONTRACT BETWEEN  
THE CITY OF WOONSOCKET AND

---

FOR

---

Table of Contents

1 Scope of Services.....	1
2 City Staff Assistance.....	2
3 Term; Time of Performance.....	2
4 Compensation .....	2
5 Extra Work.....	2
6 Method of Payment.....	2
7 Disposition of Plans, Estimates and Other Documents .....	3
8 Hold Harmless .....	3
9 Professional Liability Insurance.....	4
10 Certificate of Insurance.....	5
11 Independent Contractor.....	5
12 Termination of Agreement.....	6
13 Assignment and Delegation .....	6
14 Copyrights/Patents .....	6
15 City Employees and Officials .....	6
16 Notices.....	7
17 Consent .....	7
18 Modification.....	7
19 Section Headings .....	8
20 Interpretation of this Agreement.....	8
21 Duplicate Original.....	9
22 Immigration.....	9
23 Legal Services Subcontracting Prohibited .....	9
24 Attorney's Fees.....	9
25 Survival .....	9
26 Governing Law .....	10
27 Signatories.....	10
28 Entirety.....	10
29 Effective Date.....	11

## **ENGINE GENERATOR**

**PART 1, GENERAL**

**PART 2, PRODUCTS**

**PART 3, EXECUTION**

## **AUTOMATIC TRANSFER SWITCH**

**PART 1, GENERAL**

**PART 2, PRODUCTS**

**PART 3, EXECUTION**

## SECTION 26 32 13

### ENGINE GENERATOR

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A This section includes the following items from a single supplier:
  - 1. Engine Generator Set.
  - 2. Enclosure
  - 3. Related Accessories as specified
- B Products Furnished or Supplied but not installed
- C Products Installed but not furnished or supplied
- D Related Requirements
  - 1. It is the intent of this specification to secure an engine-driven generator set that has been prototype tested, factory built, production-tested, and site-tested together with all accessories necessary for a complete installation as shown on the plans and drawings and specified herein.
  - 2. Any exceptions to the published specifications shall be subject to the approval of the engineer and submitted minimum 10 days prior to the closing of the bid with a line by line summary description of all the items of compliance, any items that have been omitted or have been taken exception to, and a complete description of all deviations.
  - 3. It is the intent of this specification to secure a generator set system that has been tested during design verification, in production, and at the final job site. The generator set will be a commercial design and will be complete with all of the necessary accessories for complete installation as shown on the plans, drawings, and specifications herein. The equipment supplied shall meet the requirements of the National Electrical Code and applicable local codes and regulations.
  - 4. All equipment shall be new and of current production by an international, power system manufacturer of generators, transfer switches, and paralleling switchgear. The manufacturer shall be a supplier of a complete and coordinated system. There will be single-source responsibility for warranty, parts, and service through a factory-authorized representative with factory-trained technicians.

##### 1.2 PRICE AND PAYMENT PROCEDURES

- A Allowances
- B Unit Prices
- C Alternates or Alternatives
- D Measurement and Payment

##### 1.3 REFERENCES

- A Abbreviations and Acronyms
- B Definitions
- C Reference Standards

##### 1.4 ADMINISTRATIVE REQUIREMENTS

- A Coordination
- B Pre-installation Meeting
- C Sequencing
- D Scheduling

## 1.5 SUBMITTALS

### A Action Submittals

- 1. Product Data
  - a The submittal shall include prototype test certification and specification sheets showing all standard and optional accessories to be supplied; schematic wiring diagrams, dimension drawings, and interconnection diagrams identifying by terminal number each required interconnection between the generator set, the transfer switch, and the remote annunciator panel if it is included elsewhere in these specifications.
- 2. Shop Drawings
- 3. Samples

### B Informational Submittal

- 1. Certificates
  - a The generator set shall be listed to UL 2200 or submitted to an independent third party certification process to verify compliance as installed.**
- 2. Test and Evaluation Reports
- 3. Manufacturer's Instruction
- 4. Source Quality Control Submittals
- 5. Field or Site Quality Control
- 6. Manufacturer's Report
- 7. Special Procedure Submittal
- 8. Qualification Statement

### C Closeout Submittal

- 1. Maintenance Contracts
- 2. Operation And Maintenance Data
- 3. Bonds
- 4. Warranty Documentation
- 5. Record Documentation
- 6. Software

### D Maintenance Material Submittals

## 1.6 Quality Assurance

### A Regulatory Agency

- 1. The generator set shall conform to the requirements of the following codes and standards:
  - a CSA C22.2, No. 14-M91 Industrial Control Equipment.
  - b EN50082-2, Electromagnetic Compatibility-Generic Immunity Requirements, Part 2: Industrial.
  - c EN55011, Limits and Methods of Measurement of Radio Interference Characteristics of Industrial, Scientific and Medical Equipment.
  - d IEC8528 part 4, Control Systems for Generator Sets.

- e IEC Std 61000-2 and 61000-3 for susceptibility, 61000-6 radiated and conducted electromagnetic emissions.
  - f IEEE446 Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications.
  - g NFPA 70, National Electrical Code, Equipment shall be suitable for use in systems in compliance to Article 700, 701, and 702.
  - h NFPA 99, Essential Electrical Systems for Health Care Facilities.
  - i NFPA 110, Emergency and Standby Power Systems. The generator set shall meet all requirements for Level 1 systems. Level 1 prototype tests required by this standard shall have been performed on a complete and functional unit. Component level type tests will not substitute for this requirement.
- 2. Qualifications
    - a The equipment shall be produced by a manufacturer who is ISO 9001 certified for the design, development, production and service of its complete product line.
    - b The power system shall be produced by a manufacturer who has produced this type of equipment for a period of at least 10 years and who maintains a service organization available twenty-four hours a day throughout the year.
  - 3. Manufacturers
    - a The power system shall be furnished by a single manufacturer who shall be responsible for the design, coordination, and testing of the complete system. The entire system shall be installed as shown on the plans, drawings, and specifications herein.
  - 4. Suppliers
  - 5. Fabricators
  - 6. Installers/ Applicators/ Erectors
  - 7. Testing Agencies
  - 8. Licensed Professional
  - 9. Certificates
  - 10. Preconstruction testing
  - 11. Field and Site Samples
  - 12. Mock-ups

### **1.7 Delivery, Storage, and Handling**

- A Delivery and Acceptance Requirements
- B Storage and Handling Requirements
- C Packaging Waste Management

### **1.8 Field or Site Conditions**

- A Ambient Conditions
  - 1. Engine- generator set shall operate in the following conditions without any damage to the unit or its loads.
    - a Ambient Temperature: 77 °F
    - b Altitude : 500 ft
    - c Relative Humidity: 95%
- B Existing Conditions

### **1.9 Warranty or Bond**

A Manufacturer's Warranty

1. The generator set shall include a standard warranty covering one (1) year or 2000 hours, whichever occurs first, to guarantee against defective material and workmanship in accordance with the manufacturer's published warranty from the date of initial startup.
2. The generator set manufacturer and its distributor shall maintain a 24-hour parts and service organization. This organization shall regularly engage in maintenance contract programs to perform preventive maintenance and service on equipment similar to that specified. A service agreement shall be available and shall include system operation under simulated operating conditions; adjustment to the generator set, transfer switch, and switchgear controls as required, and certification in the owner's maintenance log of repairs made and functional tests performed on all systems.

B Special Warranty

C Extended Correction Period

## PART 2 PRODUCTS

### 2.1 Owner-Furnished or Owner-Supplied

A New Products

B Existing Products

### 2.2 Equipment

A Equipment

1. The generator set shall be a Kohler model 125REOZJG with a 4R12X alternator. It shall provide 155.00 kVA and 124.00 kW when operating at 120/208 volts, 60 Hz, 0.80 power factor. The generator set shall be capable of a 130°C Standby rating while operating in an ambient condition of less than or equal to 77 °F and a maximum elevation of 500 ft above sea level. The standby rating shall be available for the duration of the outage.

B Engine

1. The minimum 4.5-liter displacement engine shall deliver a minimum of 197 HP at a governed engine speed of 1800 rpm, and shall be equipped with the following:
  - a. Electronic isochronous governor capable of 0.25% steady-state frequency regulation
  - b. 12-volt positive-engagement solenoid shift-starting motor
  - c. 65-ampere automatic battery charging alternator with a solid-state voltage regulation
  - d. Positive displacement, full-pressure lubrication oil pump, cartridge oil filters, dipstick, and oil drain
  - e. Dry-type replaceable air cleaner elements for normal applications
  - f. Engine-driven or electric fuel-transfer pump including fuel filter and electric solenoid fuel shutoff valve capable of lifting fuel
  - g. The turbocharged engine shall be fueled by diesel
  - h. The engine shall have a minimum of 4 cylinders and be liquid-cooled
2. The engine shall be EPA certified from the factory
3. The generator must accept rated load in one-step.

C Cooling System

1. The engine shall be liquid-cooled by a closed loop, unit mounted radiator rated to operate the generator set at full load at an ambient temperature of 50 degrees C (122 degrees F).

The radiator fan and other rotating engine parts shall be guarded against accidental contact.

**D Standard Air Cleaner**

1. The air cleaner shall provide engine air filtration which meets the engine manufacturer's specifications under typical operating conditions.

**E Battery**

1. Each genset requires a maintenance free BCI group 24 battery which must meet the engine manufactures' specifications for the ambient conditions specified in Part 1 Project Conditions and shall comply with the NFPA requirements for engine cranking cycles. This battery shall be rated according to SAE Standards J-537 with a minimum cold cranking amp of 650 amps and a minimum reserve capacity of 120 Minutes at 80F. The battery plates shall be constructed of a Calcium-Lead alloy to provide long waterless operation and extended battery life. The battery must contain a handle to aid in lifting and the case must be constructed of polypropylene to resist breakage and extend service life.
2. Battery rack and battery cables capable of holding the manufacturer's recommended batteries shall be supplied.

**F Housing**

1. Level 1 Sound Attenuated Enclosure
  - a The generator set shall be supplied with a Sound Attenuated Enclosure, providing a sound pressure of 73 dB(A) while the generator is operating at 100% load at 7 meters (23 feet) – free field – using acoustic insulation and acoustic-lined inlet hoods, constructed from high strength, low alloy 14-gauge galvanized steel. The acoustic insulation used shall meet UL 94 HF1 flammability classification. The enclosure shall be manufactured from bolted panels to facilitate service, future modifications, or field replacement. The enclosure shall use external vertical air inlet and outlet hoods with 90 degree angles to discharge air up and reduce noise. The enclosure shall have an integral rodent guard and skid end caps and shall have bracing to meet 241 kph (150 mph) wind loading.
  - b The enclosure components and skid shall be cleaned with a two-stage alkaline cleaning process to remove grease, grit, and grime from parts. Components shall then be subjected to a Zirconium-based conversion coating process to prepare the metal for electrocoat (e-coat) adhesion. All enclosure parts shall receive an 100% epoxy primer electrocoat (e-coat) with high-edge protection. Following the e-coat process, the parts shall be finish coated with powder baked paint for superior finish, durability, and appearance with a Power Armor™ industrial finish that provides heavy duty durability in harsh conditions, and is fade-, scratch- and corrosion-resistant.
  - c The enclosure must surpass a 3,000-hour salt spray corrosion test per ASTM B-1117.
  - d Enclosures will be finished in the manufacturer's standard color.
  - e The enclosures shall allow the generator set to operate at full load in an ambient temperature of 50°C with no additional derating of the electrical output of the generator set.
  - f Enclosures shall be equipped with sufficient side and end doors to allow access for operation, inspection, and service of the unit and all options. Minimum requirements are two doors per side. When the generator set controller faces the rear of the generator set, an additional rear facing door is required. Access to the controller and main line circuit breaker shall meet the requirements of the National Electric Code.
  - g Doors shall be fitted with hinges, hardware, and the doors shall be removable.
  - h Doors shall be equipped with lockable latches. Locks shall be keyed alike. Door locks shall be recessed to minimize potential of damage to door/enclosure.

- i A duct between the radiator and air outlet shall be provided to prevent re-circulation of hot air.
  - j The complete exhaust system shall be internal to the enclosure.
  - k The critical silencer shall be fitted with a tailpipe and rain cap.
- G Fuel oil storage
- 1. Double Wall Secondary Containment Sub-Base Fuel Tank
    - a **The generator set shall be supplied with a sub-base fuel tank of sufficient capacity to hold 583 gallons of diesel fuel.**
    - b **The sub-base fuel system shall be listed under UL 142, subsection entitled Special Purpose Tanks EFVT category, and will bear their mark of UL Approval according to their particular classification.**
    - c .3. **The above ground steel secondary containment rectangular tank for use as a sub base for diesel generators is manufactured and intended to be installed in accordance with the Flammable and Combustible Liquids Code—NFPA 30, the Standard for Installation and Use of Stationary Combustible Engine and Gas Turbines—NFPA 37, and Emergency and Standby Power Systems—NFPA 110.**
      - d **The primary tank shall be rectangular in shape and constructed in clam shell fashion to ensure maximum structural integrity and allow the use of a full throat fillet weld.**
      - e **Steel Channel Support System. Reinforced steel box channel for generator support, with a load rating of 5,000 lbs. per generator mounting hole location. Full height gussets at either end of channel and at generator mounting holes shall be utilized.**
      - f **Exterior Finish. The sub-base tank exterior finish shall be Power Armor Plus™, a polyurea-textured rubberized coating.**
      - g **Normal venting shall be sized in accordance with the American Petroleum Institute Standard No 2000, Venting Atmospheric and Low Pressure Storage Tanks not less than 1-1/4" (3 cm.) nominal inside diameter.**
      - h **The emergency vent opening shall be sized to accommodate the total capacity of both normal and emergency venting and shall be not less than that derived from NFPA 30, table 2-8, and based on the wetted surface area of the tank. The wetted area of the tank shall be calculated on the basis of 100 percent of the primary tank. The vent is to be spring-pressure operated: opening pressure is 0.5/psig and full opening pressure is 2.5 psig. The emergency relief vent is to be sized to accommodate the total venting capacity of both normal and emergency vents.**
      - i **There shall be a 2" NPT opening within the primary tank and lockable manual fill cap.**
      - j **A direct reading, UL listed, magnetic fuel level gauge with a hermetically sealed, vacuum tested dial, to eliminate fogging, shall be provided.**
      - k **A float switch for remote or local annunciation of a (50% standard) low fuel level condition shall be supplied.**
- H Controller
- 1. Decision-Maker® 3000 Generator Set Controller
    - a. The generator set controller shall be a microprocessor based control system that will provide automatic starting, system monitoring, and protection. The controller system shall also provide local monitoring and remote monitoring. The control system shall be capable of PC based updating of all necessary parameters, firmware, and software.
    - b. The controller shall be mounted on the generator set and shall have integral vibration isolation. The controller shall be prototype and

reliability tested to ensure operation in the conditions encountered.

2. Codes and Standards
  - a. The generator set controller shall meet NFPA 110 Level 1 requirements and shall include an integral alarm horn as required by NFPA.
  - b. The controller shall meet NFPA 99 and NEC requirements.
  - c. The controller shall be UL 508 listed.
3. Applicability
  - a. The controller shall be a standard offering in the manufacturer's controller product line.
  - b. The controller shall support 12-volt and 24volt starting systems.
  - c. The controller's environmental specification shall be: -40°C to 70°C operating temperature range and 5-95% humidity, non-condensing.
  - d. The controller shall mount on the generator or remotely within 40 feet with viewable access.
4. Controller Buttons, Display and Components
  - a. The generator set controller shall include the following features and functions:
    1. Push button Master Control buttons. The buttons shall be tactile-feel membrane with an indicator light to initiate the following functions:
      - a. Run Mode: When in the run mode the generator set shall start as directed by the operator.
      - b. Off/Reset Mode: When in the Off/Reset mode the generator set shall stop, the reset shall reset all faults, allowing for the restarting of the generator set after a shutdown.
      - c. Auto Mode: When in Auto the mode the generator set shall be ready to accept a signal from a remote device.
    2. Emergency Stop Switch. The remote stop switch shall be red in color with a "mushroom" type head. Depressing the stop button will immediately stop the generator set and lockout the generator set for any automatic remote starting.
    3. Push Button/Rotary Selector dial. This dial shall be used for selection of all Menus and sub-menus. Rotating the dial moves you through the menus, pushing the dial selects the menu and function/features in that menu. Pushing the button selects the feature/function and sub-menus.
    4. Digital Display. The digital display shall be alphanumeric, with 2 lines of data and approximately 24 characters. The display shall have back lighting for ease of operator use in high and low light conditions. The display shall display status of all faults and warnings. The display shall also display any engine faults. While the generator set is running, the display shall scroll all-important information across the screen for ease of operator use. The scroll can be stopped by pushing the rotary dial. The display shall fall asleep when the generator set is not running and will wake-up when the generator set starts or the rotary dial is depressed.
    5. Fault Light. The controller shall have an annunciator fault light

- that glows red for faults and yellow for warnings. These faults and warnings shall be displayed in the digital display. The fault light will also glow yellow when not in AUTO.
6. Alarm Horn. The controller shall provide an alarm horn that sounds when any faults or warnings are present. The horn shall also sound when the controller is not in the AUTO mode.
  7. Alarm Silence/Lamp Test Button. When this button is depressed, it shall test all controller lamps. This button will also silence the alarm horn when the unit is not AUTO.
  8. USB Connection. The controller shall have a USB connection on the face of the controller. This connection shall allow for updating of all software and firmware. This port shall also allow for all servicing of generator set parameters, fault diagnostics and viewing of all controller information via use a laptop computer.
  9. Dedicated user inputs. The controller shall have dedicated inputs for remote emergency stop switch, remote 2-wire star for transfer switch and auxiliary shutdown.
  10. The controller shall have auto resettable circuit protection integral on the circuit board.
5. System Controller Monitoring and Status Features and Functions
- a. The generator controller shall display and monitor the following engine and alternator functions and allow adjustments of certain parameters at the controller:
    1. Overview menu
      - a. Active shutdowns and warnings shall be displayed if present and without the need of operator interface
      - b. Engine runtime with total hours
      - c. Average line to line voltage
      - d. Coolant temperature
      - e. Fuel level or pressure
      - f. Oil pressure
      - g. Battery voltage
      - h. Software version
      - i. Frequency
      - j. Average current
    2. Engine metering menu.
      - a. Engine speed
      - b. Oil pressure
      - c. Coolant temperature
      - d. Battery voltage
    3. Generator metering menu.
      - a. Total power in VA
      - b. Total power in W
      - c. Rated power % used
      - d. Voltage L-L and L-N for all phases
      - e. Current L1, L2, L3
      - f. Frequency
    4. Generator set information.

- a. Generator set model number
    - b. Generator set serial number
    - c. Controller set number
  5. Generator set run time.
    - a. Engine run time total hours
    - b. Engine loaded total hours
    - c. Number of engine starts
    - d. Total energy in kW
  6. Generator set system
    - a. System voltage
    - b. System frequency 50/60Hz
    - c. System phase, single/three phase
    - d. Power rating kW
    - e. Amperage rating
    - f. Power type standby/prime
    - g. Measurement units, metric/English units adjustable
    - h. Alarm silence, always or auto only
  7. Generator set calibration, the following are adjustable at the controller.
    - a. Voltage L-L and L-N all phases
    - b. Current L1, L2, L3
    - c. Reset all calibrations
  8. Voltage regulation, +/-0.5% regulation, the following is adjustable at the controller.
    - a. Voltage Adjustable +/- 10%
  9. Digital and Analog Inputs and outputs
    - a. Displays settings and status
  10. Event Log
    - a. Stores event history, up to 1000 events
6. Controller Engine control features and functions
    - a. Automatic restart - the controller has automatic restart feature that initiates the start routine and re-crank after a failed start attempt.
    - b. Cyclic cranking - the controller shall have programmable cyclic cranking
    - c. Engine starting aid - the controller shall have the capability of providing control for an optional engine starting aid.
    - d. The control system shall include time delays for engine start and cool down.
    - e. The control system shall interface with the engine ECM and display engine fault codes and warnings. The ECM shall also include sender failure monitoring to help distinguish between failed senders and actual failure conditions.
    - f. The controller shall monitor and display engine governor functions with include steady state and transient frequency monitoring
  7. Controller Alternator control features and functions
    - a. Integrated hybrid voltage regulator. The system shall have integral microprocessor based voltage regulator system that provides +/- 5% voltage regulation, no-load to full load with three phase sensing. The system is prototype tested and control variation of voltage to

frequency. The voltage regulator shall be adjustable at the controller with maximum +/- 10% adjustable of nominal voltage.

- b. AC output voltage regulator adjustment. The system shall allow for adjustment of the integral voltage regulator with maximum of +/- 10% adjustment of the system voltage.
  - c. Alternator thermal overload protection. The system shall have integral alternator overload and short circuit protection matched to each alternator for the particular voltage and phase configuration.
  - d. Power metering. The controller digitally displays power metering of kW and kVA.
8. Other control features and functions
- a. Event logging. The controller keeps a record of up to 1000 events, for warning and shutdown faults. This fault information becomes a stored record of systems events and can be reset.
  - b. Historical data logging. The controller total number of generator set successful start shall be recorded and displayed.
  - c. Programmable access. The control system shall include a USB port that gives service technicians the ability to provide software and firmware upgrades. The system shall also be capable of allowing setting of all critical parameters using the service software and a laptop computer. All parameters and setting should be capable to being stored on a laptop for future upgrades of printing for analysis.
9. Generator Set Warning, Shutdown Alarm and Status
- a. The generator set shall have alarms and status indication lamps that show non-automatic status and warning and shutdown conditions. The controller shall indicate with a warning lamp and or alarm and on the digital display screen any shutdown, warning or engine fault condition that exists in the generator set system. The following alarms and shutdowns shall exist as a minimum:
    1. Engine functions
      - a. Critical high fuel level (alarm)
      - b. ECM communication loss (shutdown)
      - c. ECM diagnostics (alarm & shutdown)
      - d. Engine overspeed (shutdown)
      - e. Engine start aid active
      - f. Engine under speed (shutdown)
      - g. Fuel tank leak (alarm & shutdown)
      - h. High DC battery voltage (alarm)
      - i. High coolant temperature (alarm & shutdown)
      - j. High fuel level (alarm)
      - k. Low DC battery voltage (alarm)
      - l. Low coolant level (shutdown)
      - m. Low coolant temperature (alarm)
      - n. Low cranking voltage (alarm)
      - o. Low engine oil level (alarm & shutdown)
      - p. Low fuel level (alarm & shutdown)
      - q. Low fuel pressure (alarm)
      - r. Low oil pressure (alarm & shutdown)
      - s. No coolant temperature signal (shutdown)

- t. No oil pressure signal (shutdown)
- u. Overcrank (shutdown)
- v. Speed sensor fault (alarm)
- 2. Generator functions
  - a. AC sensing loss over & under current (alarm & shutdown)
  - b. Alternator protection (shutdown)
  - c. Ground fault input (alarm)
  - d. kW overload (shutdown)
  - e. Locked rotor (shutdown)
  - f. Over-frequency (shutdown)
  - g. Over AC voltage (shutdown)
  - h. Under-frequency (shutdown)
  - i. Under AC voltage (shutdown)
  - j. Emergency stop (shutdown)
- 3. Other General functions
  - a. Battery charger fault (alarm)
  - b. Common fault (shutdown)
  - c. Common warning (alarm)
  - d. Master switch not in auto (alarm)
  - e. Generator running
  - f. Input/Output fault (alarm)
- 4. The generator set controller shall also be capable of meeting all necessary NFPA 110 level 1 requirements that include several of the above along with; EPS supplying load, Master switch “not in auto”, and contacts for local and remote common alarm.
- 10. Communications
  - a. If the generator set engine is equipped with an ECM (engine control module), the controller shall communicate with the ECM for control, monitoring, diagnosis, and meet SAE J1939 standards
  - b. Kohler proprietary RBUS communication shall be available.
  - c. A RBUS shall be able to monitor and alter parameters, and start or stop a generator.
  - d. The controller shall have the capability to communicate to a personal computer (IBM or compatible) and appropriate application software
  - e. A variety of connections shall be available based on requirements:
    - 1. A single control connection to a PC via USB
    - 2. Internet connection via Ethernet
  - f. Generator and transfer switch controls shall be equipped with communications modules capable of connecting to the same communication network.

#### I Generator Overcurrent and Fault Protection

- 1. The generator shall be provided with a factory installed, 80% rated line circuit breaker rated at 600.00 amperes that is UL489 listed. Line circuit breakers shall be sized for the rated ampacity of the loads served by the breaker per the NEC.
- 2. The circuit breaker(s) shall incorporate a thermo-magnetic trip unit.
- 3. Load side lugs shall be provided from the factory. The line circuit breaker shall include auxiliary contacts, shunt trip, under voltage trip, alarm switch, and over

current switch functionality. Load side breaker connections made at the factory shall be separated from field connections.

4. The shunt trip device shall be connected to trip the generator breaker when the generator-set is shut down by other protective devices.
5. When GFI is required per the NEC, additional neutrals shall be factory installed, and the alarm indication shall be integrated with the other generator-set alarms.
6. Barriers to provide segregation of wiring from an emergency source to emergency loads from all other wiring and equipment, if required by the NEC, shall be provided.

#### J Alternator

1. The alternator shall be salient-pole, brushless, 2/3-pitch, with 4 bus bar provision for external connections, self-ventilated, with drip-proof construction and amortisseur rotor windings, and skewed for smooth voltage waveform. The ratings shall meet the NEMA standard (MG1-32.40) temperature rise limits. The insulation shall be class H per UL1446 and the varnish shall be a vacuum pressure impregnated, fungus resistant epoxy. Temperature rise of the rotor and stator shall be limited to 130°C Standby. The PMG based excitation system shall be of brushless construction controlled by a digital, three phase sensing, solid- state, voltage regulator. The AVR shall be capable of proper operation under severe nonlinear loads and provide individual adjustments for voltage range, stability and volts-per-hertz operations. The AVR shall be protected from the environment by conformal coating. The waveform harmonic distortion shall not exceed 5% total RMS measured line-to-line at full rated load. The TIF factor shall not exceed 50.
2. The alternator shall have a maintenance-free bearing, designed for 40000 hour B10 life. The alternator shall be directly connected to the flywheel housing with a semi-flexible coupling between the rotor and the flywheel.
3. The generator shall be inherently capable of sustaining at least 300% of rated current for at least 10 seconds under a 3-phase symmetrical short circuit without the addition of separate current-support devices.
4. Motor starting performance and voltage dip determinations shall be based on the complete generator set. The generator set shall be capable of supplying 336.00 LRKVA for starting motor loads with a maximum instantaneous voltage dip of 35%, as measured by a digital RMS transient recorder in accordance with IEEE Standard 115. Motor starting performance and voltage dip determination that does not account for all components affecting total voltage dip, i.e., engine, alternator, voltage regulator, and governor will not be acceptable. As such, the generator set shall be prototype tested to optimize and determine performance as a generator set system.

#### K Vibration Isolation

1. Vibration isolators shall be provided between the engine-alternator and heavy-duty steel base.

### 2.3 Description

- A Regulatory Requirements
- B Sustainability Characteristics

### 2.4 Performance / Design Criteria

- A Capacities

### 2.5 Operation

- A Operators
- B Controls
- C Operation Sequence

### 2.6 Materials

### 2.7 Assembly or Fabrication

- A Factory Assembly
- B Shop Fabrication

C Assembly or Fabrication Tolerances

**2.8 Mixes**

**2.9 Finishes**

A Primer Materials

B Finish Materials

C Shop Finishing Materials

**2.10 Accessories**

- A. Remote annunciator panel – The remote annunciator shall meet NFPA 110, Level 1 requirements and enable remote viewing of the generator status. The panel shall be connected to the generator controller via either network communication wires or via hard wired connections. Options shall be available to provide ATS source availability, contactor position, and loaded or unloaded test for up to four transfer switches. The panel shall have the capability to be either flush- mounted or surface-mounted. The annunciator shall meet UL508 requirements.
- B. Battery rack and battery cables capable of holding the manufacturer's recommended batteries shall be supplied.
- C. The generator set shall be supplied with a 6-ampere automatic float/equalize battery charger capable of charging both lead-acid and gel-cell type batteries, with the following features:
  - i. Automatic 3-stage float to equalization charge
  - ii. 1% steady-state voltage regulation from no load to full load over 10% AC input line voltage variation
  - iii. Indicator LED lamps for charge state indication (bulk charge/absorption/float)
  - iv. Ambient temperature operating range: -40°C to 70°C
  - v. Potting for durability and waterproofing
  - vi. Short-circuit and reverse polarity protection
  - vii. UL 1236 listed
  - viii. UL 2200 compliant
  - ix. CSA certified
  - x. Ring terminals for battery connection.
- D. Supply flexible fuel lines to provide a flexible connection between the engine fuel fittings and the fuel supply tank piping and for the fuel return lines from the injector pump per engine manufacturer's recommendations. Flex line shall have a protective steel wire braid to protect the hose from abrasion.
- E. The exhaust piping shall be gas proof, seamless, stainless steel, flexible exhaust bellows and includes the flex exhaust tube and the mounting hardware.
- F. Block Heater - The block heater shall be thermostatically controlled, 1,500 watt, 110-120 VAC - single phase, to maintain manufacturers recommended engine coolant temperature to meet the start-up requirements of NFPA 99 and NFPA 110, Level 1.

**2.11 Source Quality Control**

A. Non-Conforming Work

- 1. To ensure that the equipment has been designed and built to the highest reliability and quality standards, the manufacturer and/or local representative shall be responsible for three separate tests: design prototype tests, final production tests, and site tests.
  - a. **Design Prototype Tests.** Components of the emergency system, such as the engine/generator set, transfer switch, and accessories, shall not be subjected to prototype tests because the tests are potentially damaging. Rather, similar design prototypes and preproduction models shall be subject to the following tests:
    - i. Maximum power (kW)
    - ii. Maximum motor starting (kVA) at 35% instantaneous voltage dip.
    - iii. Alternator temperature rise by embedded thermocouple and/or

- by resistance method per NEMA MG1-32.6.
- iv. Governor speed regulation under steady-state and transient conditions.
  - v. Voltage regulation and generator transient response.
  - vi. Harmonic analysis, voltage waveform deviation, and telephone influence factor.
  - vii. Three-phase short circuit tests.
  - viii. Alternator cooling air flow.
  - ix. Torsional analysis to verify that the generator set is free of harmful torsional stresses.
  - x. Endurance testing.
- b. **Final Production Tests.** Each generator set shall be tested under varying loads with guards and exhaust system in place. Tests shall include:
- i. Single-step load pickup
  - ii. Safety shutdown device testing
  - iii. Rated Power @ 0.8 PF
  - iv. Maximum power
  - v. Upon request, a witness test, or a certified test record sent prior to shipment.
- c. **Site Tests.** The manufacturer's distribution representative shall perform an installation check, startup, and building load test. The engineer, regular operators, and the maintenance staff shall be notified of the time and date of the site test. The tests shall include:
- i. Fuel, lubricating oil, and antifreeze shall be checked for conformity to the manufacturer's recommendations, under the environmental conditions present and expected.
  - ii. Accessories that normally function while the set is standing by shall be checked prior to cranking the engine. These shall include: block heaters, battery chargers, alternator strip heaters, remote annunciators, etc.
  - iii. Generator set startup under test mode to check for exhaust leaks, path of exhaust gases outside the building, cooling air flow, movement during starting and stopping, vibration during operation, normal and emergency line-to-line voltage and frequency, and phase rotation.
  - iv. Automatic start by means of a simulated power outage to test remote-automatic starting, transfer of the load, and automatic shutdown. Prior to this test, all transfer switch timers shall be adjusted for proper system coordination. Engine coolant temperature, oil pressure, and battery charge level along with generator set voltage, amperes, and frequency shall be monitored throughout the test.

- B Non-Conforming Work
- C Manufacturer's Services
- D Coordination of Other Tests and Inspections

### **PART 3 EXECUTION**

#### **3.1 Installers**

- A **Installer List with accompanied background check.**
- B Substitution Limitations

- 3.2 Examination**
  - A Verification of Conditions
  - B Pre-installation Testing
  - C Evaluation and Assessment
- 3.3 Preparation**
  - A Protection of In-place Condition
  - B Surface Preparation
  - C Demolition/ Removal
- 3.4 Installation**
  - A Special Techniques
  - B Interface with Other Work
  - C System Integration
  - D Tolerances
- 3.5 Repair/ Restoration**
- 3.6 Reinstallation**
- 3.7 Field or Site Quality Control**
  - A Field or Site Tests and Inspection
  - B Non-Conforming Work
  - C Manufacturer's Services
- 3.8 System Startup**
- 3.9 Adjusting**
- 3.10 Cleaning**
  - A Waste Management
- 3.11 Closeout Activities**
  - B Demonstration
  - C Training
- 3.12 Protection**
- 3.13 Maintenance**
- 3.14 Attachments**

SECTION 26 32 23  
AUTOMATIC TRANSFER SWITCH

**PART 1 GENERAL**

**1.10 SUMMARY**

- A This section includes the following items from a single supplier:
  - 1. Automatic transfer switch
  - 2. Related Accessories as specified
- B Products Furnished or Supplied but not installed
- C Products Installed but not furnished or supplied
- D Related Requirements
  - 1. It is the intent of this specification to secure an automatic transfer switch that has been prototype tested, factory built, production-tested, and site-tested together with all accessories necessary for a complete installation as shown on the plans and drawings and specified herein.
  - 2. Any exceptions to the published specifications shall be subject to the approval of the engineer and submitted minimum 10 days prior to the closing of the bid with a line by line summary description of all the items of compliance, any items that have been omitted or have been taken exception to, and a complete description of all deviations.

3. It is the intent of this specification to secure an automatic transfer switch that has been tested during design verification, in production, and at the final job site. The automatic transfer switch will be a commercial design and will be complete with all of the necessary accessories for complete installation as shown on the plans, drawings, and specifications herein. The equipment supplied shall meet the requirements of the National Electrical Code and applicable local codes and regulations.
4. All equipment shall be new and of current production by an international, power system manufacturer of generators, transfer switches, and paralleling switchgear. The manufacturer shall be a supplier of a complete and coordinated system. There will be single-source responsibility for warranty, parts, and service through a factory-authorized representative with factory-trained technicians.

#### **1.11 PRICE AND PAYMENT PROCEDURES**

- A Allowances
- B Unit Prices
- C Alternates or Alternatives
- D Measurement and Payment

#### **1.12 REFERENCES**

- A Abbreviations and Acronyms
- B Definitions
- C Reference Standards

#### **1.13 ADMINISTRATIVE REQUIREMENTS**

- A Coordination
- B Pre-installation Meeting
- C Sequencing
- D Scheduling

#### **1.14 SUBMITTALS**

- A Action Submittals
  1. Product Data
    - a The submittal shall include specification sheets showing all standard and optional accessories to be supplied; schematic wiring diagrams, dimension drawings, and interconnection diagrams identifying by terminal number each required interconnection between the generator set, the transfer switch, and the remote annunciator panel if it is included elsewhere in these specifications.
  2. Shop Drawings
  3. Samples
- B Informational Submittal
  1. Certificates
  2. Test and Evaluation Reports
  3. Manufacturer's Instruction
  4. Source Quality Control Submittals
  5. Field or Site Quality Control
  6. Manufacturer's Report

7. Special Procedure Submittal
  8. Qualification Statement
- C Closeout Submittals
1. Maintenance Contracts
  2. Operation And Maintenance Data
  3. Bonds
  4. Warranty Documentation
  5. Record Documentation
  6. Software

- D Maintenance Material Submittals
1. Literature
  2. Spare Parts
  3. Extra Stock Materials
  4. Tools

### **1.15 Quality Assurance**

A Regulatory Agency

1. The automatic transfer switch shall conform to the requirements of the following codes and standards:
  - a UL 1008 - Standard for Transfer Switch Equipment
  - b IEC 947-6-1 Low-voltage Switchgear and Control gear; Multifunction equipment; Automatic Transfer Switching Equipment EN55011, Limits and Methods of Measurement of Radio Interference Characteristics of Industrial, Scientific and Medical Equipment.
  - c NFPA 70 - National Electrical Code
  - d NFPA 99 - Essential Electrical Systems for Health Care Facilities
  - e NFPA 110 - Emergency and Standby Power Systems
  - f IEEE Standard 446 - IEEE Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications
  - g NEMA Standard ICS 10-2005, Electromechanical AC Transfer Switch Equipment.
  - h EN61000-4-4 Fast Transient Immunity Severity Level 4
  - i EN61000-4-5 Surge Immunity Class 4 (voltage sensing and programmable inputs only)
  - j IEEE 472 (ANSI C37.90A) Ring Wave Test
  - k IEC Specifications for EMI/EMC Immunity (CISPR 11, IEC 1000-4-2, IEC 1000-4-3, IEC 1000-4-4, IEC 1000-4-5, IEC 1000-4-6, IEC 1000-4-8, IEC 1000-4-11)
  - l CSA C22.2 No. 178 certification
2. Qualifications
  - a The automatic transfer switch shall be produced by a manufacturer who is ISO 9001 certified for the design, development, production and service of its complete product line.
  - b A manufacturer who has produced this type of equipment for a period of at least 10 years and who maintains a service organization available twenty-four hours a day throughout the year shall produce the automatic transfer switch.

3. Manufacturers
  - a The automatic transfer switch shall be furnished by a single manufacturer who shall be responsible for the design, coordination, and testing of the complete system. The entire system shall be installed as shown on the plans, drawings, and specifications herein.
  - b The manufacturer shall maintain a national service organization of employing personnel located throughout the contiguous United States. The Service center's personnel must be factory trained and must be on call 24 hours a day, 365 days a year.
  - c The manufacturer shall maintain records of each switch, by serial number, for a minimum of 20 years.
4. Suppliers
5. Fabricators
6. Installers/ Applicators/ Erectors
7. Testing Agencies
8. Licensed Professional
9. Certificates
10. Preconstruction testing
11. Field and Site Samples
12. Mock-ups

**1.16 Delivery, Storage, and Handling**

- A Delivery and Acceptance Requirements
- B Storage and Handling Requirements
- C Packaging Waste Management

**1.17 Field or Site Conditions**

- A Ambient Conditions
  1. Automatic transfer switch shall operate in the following conditions without any damage to the unit or its loads.
    - a Ambient Temperature: -4 to 158 Degrees F
    - b Relative Humidity: 5% to 95% non condensing
- B Existing Conditions

**1.18 Warranty or Bond**

- A Manufacturer's Warranty
  1. The ATS shall include a standard warranty covering one (1) year to guarantee against defective material and workmanship in accordance with the manufacturer's published warranty from the date of initial startup.
  2. The ATS manufacturer and its distributor shall maintain a 24-hour parts and service organization. This organization shall regularly engage in maintenance contract programs to perform preventive maintenance and service on equipment similar to that specified. A service agreement shall be available and shall include system operation under simulated operating conditions; adjustment to the generator set, transfer switch, and switchgear controls as required, and certification in the owner's maintenance log of repairs made and functional tests performed on all systems.
- B Special Warranty

C Extended Correction Period

**PART 2 PRODUCTS**

**2.12 Owner-Furnished or Owner-Supplied**

- A New Products
- B Existing Products

**2.13 Equipment**

A Equipment

1. Furnish and install an automatic transfer switches system(s) with 4-Pole / 4-Wire, Solid Neutral, 1200 Amps, 208V/60Hz. Each automatic transfer shall consist of an inherently double throw power transfer switch mechanism and a microprocessor controller to provide automatic operation. All transfer switches and controllers shall be the products of the same manufacturer.

B Manufacturer

1. Automatic transfer switches shall be Kohler Service Entrance Rated - Programmed Transition (KEP)/KEP-DCVA-1200#PK. Any alternate shall be submitted for approval to the consulting engineer at least 10 days prior to bid date. Alternate bids shall include a line-by-line clarification of the specification marked with "D" for deviation; "E" for exception, and "C" for comply.

C Construction

D Enclosure

1. The ATS shall be furnished in a NEMA 1 enclosure.
2. All standard door mounted switches and indicating LEDs shall be integrated into a flush-mounted, interface membrane or equivalent in the enclosure door for easy viewing & replacement. The panel shall be capable of having a manual locking feature to allow the user to lockout all membrane mounted control switches to prevent unauthorized tampering. This cover shall be mounted with hinges and have a latch that may be padlocked. The membrane panel shall be suitable for mounting by others when furnished on open type units.

**2.14 Description**

C Regulatory Requirements

D Sustainability Characteristics

**2.15 Performance / Design Criteria**

B Capacities

**2.16 Operation**

A Operators

B Controls

1. A four line, 20 character LCD display and dynamic 4 button keypad shall be an integral part of the controller for viewing all available data and setting desired operational parameters. Operational parameters shall also be available for viewing and control through the communications interface port or USB. The following parameters shall only be adjustable via a password protected programming on the controller:
  - a Nominal line voltage and frequency
  - b Single or three phase sensing
  - c Operating parameter protection

- d Transfer operating mode configuration (Standard transition, Programmed transition, or Closed transition)

### C Voltage and Frequency

1. Voltage (all phases) and frequency on both the normal and emergency sources shall be continuously monitored, with the following pickup, dropout, and trip setting capabilities (values shown as % of nominal unless otherwise specified):
  - a Parameter                      Dropout/Trip      Pickup/Reset
  - b Under voltage                75 to 98%        85 to 100%
  - c Over voltage                 106 to 135%     95 to 100% of trip
  - d Under frequency             95 to 99%        80 to 95%
  - e Over frequency              01 to 115%      105 to 120%
  - f Voltage unbalance          5 to 20%         3 to 18%
2. Repetitive accuracy of all settings shall be within  $\pm 0.5\%$  over an operating temperature range of  $-20^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ .
3. An adjustable dropout time for transient voltage and frequency excursions shall be provided. The time delays shall be 0.1 to 9.9 seconds for voltage and .1 to 15 seconds for frequency.
4. Voltage and frequency settings shall be field adjustable in 1% increments either locally with the display and keypad, remotely via the communications interface port or USB.
5. The controller shall be capable of sensing the phase rotation of both the normal and emergency sources. The source shall be considered unacceptable if the phase rotation is not the preferred rotation selected (ABC or BAC). Unacceptable phase rotation shall be indicated on the LCD; the service required LED and the annunciation through the communication protocol and dry contacts. In addition, the phase rotation sensing shall be capable of being disabled, if required.
6. The controller shall be capable of detecting a single phasing condition of a source, even though a voltage may be regenerated by the load. This condition is a loss of phase and shall be considered a failed source.
7. Source status screens shall be provided for both normal & emergency to provide digital readout of voltage on all 3 phases (phase to phase and phase to neutral), frequency, and phase rotation.

### D Time Delays

### E Additional Features

### F Operation Sequence

## 2.17 Materials

## 2.18 Assembly or Fabrication

### A Factory Assembly

### B Shop Fabrication

### C Assembly or Fabrication Tolerances

## 2.19 Mixes

## 2.20 Finishes

### A Primer Materials

### B Finish Materials

### C Shop Finishing Materials

## 2.21 Accessories

## 2.22 Source Quality Control

A Test and Inspection

1. Upon request, the manufacturer shall provide a notarized letter certifying compliance with all of the requirements of this specification including compliance with the above codes and standards. The certification shall identify, by serial number(s), the equipment involved. No exceptions to the specifications, other than those stipulated at the time of the submittal, shall be included in the certification.
2. The ATS manufacturer shall be certified to ISO 9001 International Quality Standard and the manufacturer shall have third party certification verifying quality assurance in design/development, production, installation and servicing in accordance with ISO 9001.

B Non-Conforming Work

C Manufacturer's Services

D Coordination of Other Tests and Inspections

**PART 3 EXECUTION**

**3.15 Installers**

A Installer List

B Substitution Limitations

**3.16 Examination**

A Verification of Conditions

B Pre-installation Testing

C Evaluation and Assessment

**3.17 Preparation**

A Protection of In-place Condition

B Surface Preparation

C Demolition/ Removal

**3.18 Installation**

A Special Techniques

B Interface with Other Work

C System Integration

D Tolerances

**3.19 Repair/ Restoration**

**3.20 Reinstallation**

**3.21 Field or Site Quality Control**

A Field or Site Tests and Inspection

B Non-Conforming Work

C Manufacturer's Services

**3.22 System Startup**

**3.23 Adjusting**

**3.24 Cleaning**

A Waste Management

**3.25 Closeout Activities**

A Demonstration

B Training

**3.26 Protection**

**3.27 Maintenance**

**3.28 Attachments**

**END OF SECTION**  
**END OF SECTION**