

**TOWN OF SCITUATE, RHODE ISLAND**

**INVITATION TO BID**

**PROJECT: Scituate Town Hall Generator – September 2020**

**BID NUMBER: SCIT017**

Sealed bid proposals to perform the subject project in accordance with the specifications enclosed herewith, and made a part of this invitation will be received in the Office of the Town Clerk addressed to:

**Town Clerk  
195 Danielson Pike  
N. Scituate, RI 02857**

Until **Friday, October 2, 2020 at 1:00 pm (EST)**. The bid proposals will be opened and read aloud at the Bid Opening on Friday, October 2nd at 1:15 pm. Individuals requesting interpreter services for the hearing impaired should call the Town Clerk at 647-2822, 72 hours in advance of the bid opening.

**DUE TO COVID-19 THE BID OPENING WILL BE AVAILABLE TO BE VIEWED ONLINE VIA ZOOM.**

Time: Oct 2, 2020 01:15 PM Eastern Time

Join Zoom Meeting

<https://us02web.zoom.us/j/88236758101?pwd=NDVnSHMxNUNBb2tsTSSt2MHhwQXVyUT09>

Meeting ID: 882 3675 8101

Passcode: 005769

Any bid proposal received after said date and time, whether hand delivered, submitted via United States Postal Service, or submitted via any other delivery service, shall be declared invalid. All bids must be placed in a sealed envelope that is plainly marked “**BID PROPOSAL FOR: Scituate Town Hall Generator – SEPTEMBER 2020**”.

The bid award and signing of contract conditions are set forth in the enclosed specifications. Additional copies of the Contract and Specifications may be obtained from the Town Clerk at 401-647-2822.

**Questions related to the project or requests to schedule site visit must be emailed to the Highway Director no later than 1pm on September 30, 2020 at:**  
[kloiselle@Scituateri.org](mailto:kloiselle@Scituateri.org)

**THE TOWN OF SCITUATE RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS OR ANY PARTS THEREOF; TO WAIVE INFORMALITIES AND TECHNICALITIES; AND, TO ACCEPT THAT BID WHICH THE TOWN DEEMS TO BE IN THE BEST INTEREST OF THE TOWN, WHETHER OR NOT IT IS THE LOWEST DOLLAR BID.**

## SCOPE OF WORK

Purchase and installation of a 50KW diesel fueled generator in weatherproof enclosure to be installed at the Scituate Town Hall, 195 Danielson Pike, North Scituate, Rhode Island 02857.

The generator must include a base mounted fuel tank sized for operating a minimum of 72 hours @ 75% capacity.

Vendor must also quote the installation of a transfer switch to supply a 400amp single phase panel and connection to the generator.

Installation of remote annunciator panel and emergency shut-off switch.

Vendor must also include in quote the removal of the existing pad and the proper disposal of all debris.

Vendor will construct a new pad at the location of the existing generator pad as outlined in the Specifications.

If awarded, vendor must supply all service manuals and any related mechanical/wiring schematics for the generator, transfer switch, and any related equipment.

Vendor will identify product warranty, terms and conditions that must be included in the proposal.

Vendor will identify if any subcontractors will be utilized. If so, list subcontractor name and qualifications.

Vendor must abide by specifications listed.

**NOTE: The Town of Scituate will be responsible for removal of the existing generator at the Town Hall, after the vendor disconnects all wires to the existing generator.**

## **BID CONDITIONS**

1. Bids shall be signed by a duly authorized agent or official of the contractor / vendor who has legal authority to bind the company and must clearly identify the scope of services and proposed time frame for completion. Incomplete bid forms may be cause for disqualification of the bid.
2. Bids that are renumbered or resequenced may be cause for rejection if all information cannot be easily found and identified. Bidders wishing to re-word or re-format the enclosed documents should do so in an addendum identifying the pages or sections to be changed.
3. **Bids must be submitted with three (3) complete copies.**
4. Bids must be submitted in a sealed envelope clearly marked, so as to guard against opening prior to the appointed time, with the:

**NAME / ADDRESS OF THE BIDDER**  
**WORDS "BID DOCUMENTS FOR: Scituate Town Hall Generator – SEPTEMBER 2020"**  
**DATE OF THE BID**

5. If mailed, the sealed envelope containing the proposal shall be marked as stated above and shall be enclosed in another envelope properly addressed for mailing.
6. Within a reasonable time after the bid opening, the TOWN OF SCITUATE, RHODE ISLAND, (herein after referred to as the TOWN) shall act on the award of a contract for the project.
7. The TOWN reserves the right to withdraw this request at any time based on available funding.
8. The TOWN shall be the sole judge as to whether any bid complies with these specifications, and such a decision shall be final and conclusive. Bidders shall state any exceptions taken to the bid specifications.
9. Proposals submitted in unmarked envelopes, which are opened by the TOWN in its normal course of business, will not be accepted. If time permits, the proposal may be returned to the bidder informing them that the proposal may be resubmitted in a sealed envelope properly marked as indicated above.
10. Bid prices shall not include any sales, excise or other taxes for which the TOWN is not liable. All bidders shall honor their properly submitted bid for a period of sixty (60) days subsequent to date of bid opening, without escalation.
11. Tax Compliance – Successful bidder shall be required to submit a current W-9 form in conformance with the attached sample, affirming current reporting compliance with all

relevant jurisdictions.

12. Consideration in the awarding of the CONTRACT will be given to price, experience and competence of the bidder, the nature and size of the bidder's organization, and quality of similar projects it has performed and completed in the past and a determination by the TOWN that the COMPANY has the ability to complete the work.
13. Insurance – Successful bidder shall be required to provide valid certificate of General Liability, auto, umbrella and (if required) worker's compensation insurance in conformance with the attached sample, naming the TOWN OF SCITUATE, RHODE ISLAND as additional insured.
14. Prevailing Wage - Successful bidder shall be required to furnish completed certificate guaranteeing payment of prevailing wage and indemnifying the Town of Scituate, Rhode Island from any loss whatsoever arising from failure to pay prevailing wage in conformance with the attached sample.
15. The COMPANY must bid the project as outlined in the CONTRACT and CONTRACT SPECIFICATIONS. If the COMPANY proposes to perform any optional work or to substitute any part of the CONTRACT SPECIFICATIONS, such options and/or substitutions must be explained in detail and the amount of additional or reduction in cost must be listed.
16. The following items shall also be included with the bid:
  - Personnel Roster, Client list for past five (5) years including current projects,
  - Statement of Qualifications, Non-Collusive Bid Statement
17. Each bidder must inform themselves of the conditions relating to the specifications of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of their obligation to furnish all material and labor necessary to carry out the provisions of this CONTRACT. At the time of opening of the bids, each bidder will be presumed to have read, and to be thoroughly familiar with, the plans and CONTRACT documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect to this bid.
18. The bidder's attention is directed to the fact that all applicable state laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over performance of the project shall apply to the CONTRACT throughout, and they will be deemed to be included in the CONTRACT the same as though herein written out in full.
19. The Successful Bidder shall, to secure the faithful intent of this bid, furnish to the Town payment surety, in the form of a Payment Surety Bond, which shall be issued by a reputable bonding company authorized to issue such payment surety bond in the State of Rhode Island and acceptable to the Town.

20. The Successful Bidder shall furnish to the Town a Performance Surety Bond in the amount of the Contract, which bond shall be issued by a reputable bonding company authorized to issue such performance surety in the State of Rhode Island and acceptable to the Town. The Performance Surety Bond shall be delivered to the Town prior to the commencement of work.

**TOWN OF SCITUATE, RHODE ISLAND**

**BID FORM**

**Project: Scituate Town Hall Generator – SEPTEMBER 2020**

The undersigned duly authorized agent for the **COMPANY** submitting this bid affirms and declares:

That this bid is executed with full knowledge and acceptance of the **BID CONDITIONS** enclosed with the **INVITATION TO BID** on the subject project.

That should this bid be accepted in writing by the **TOWN**, said **COMPANY** will furnish the items for which this bid is submitted as the dollar amount indicated and in full compliance with the provisions of said **SCOPE OF WORK AND PROJECT SPECIFICATIONS**.

That all items, documents, statements and other information as required by the **BID CONDITIONS** and **PROJECT SPECIFICATIONS** have been submitted herein.

That the **COMPANY** proposes to furnish the services and materials required to complete the aforesaid **PROJECT SPECIFICATIONS** in the total amount of:

(Total Dollar Amount) \_\_\_\_\_

(Written Bid) \_\_\_\_\_

\_\_\_\_\_  
Company

\_\_\_\_\_  
By: Name and Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Business address

\_\_\_\_\_  
Telephone Number

**TOWN OF SCITUATE, RHODE ISLAND**

**NON-COLLUSIVE BID STATEMENT**

All bidders are required to sign a Non-Collusive Statement with all public bids as follows:

The bid has been arrived at by the bidder independently and has been submitted without collusion with, and without any agreement, understanding, or planned common course of action with, any other vendor of materials, supplies, equipment, or services described in the Invitation to Bid, designed to limit independent bidding or competition,

And

The contents of the bid have not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid, and will not be communicated to any such person prior to the opening of the bid.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

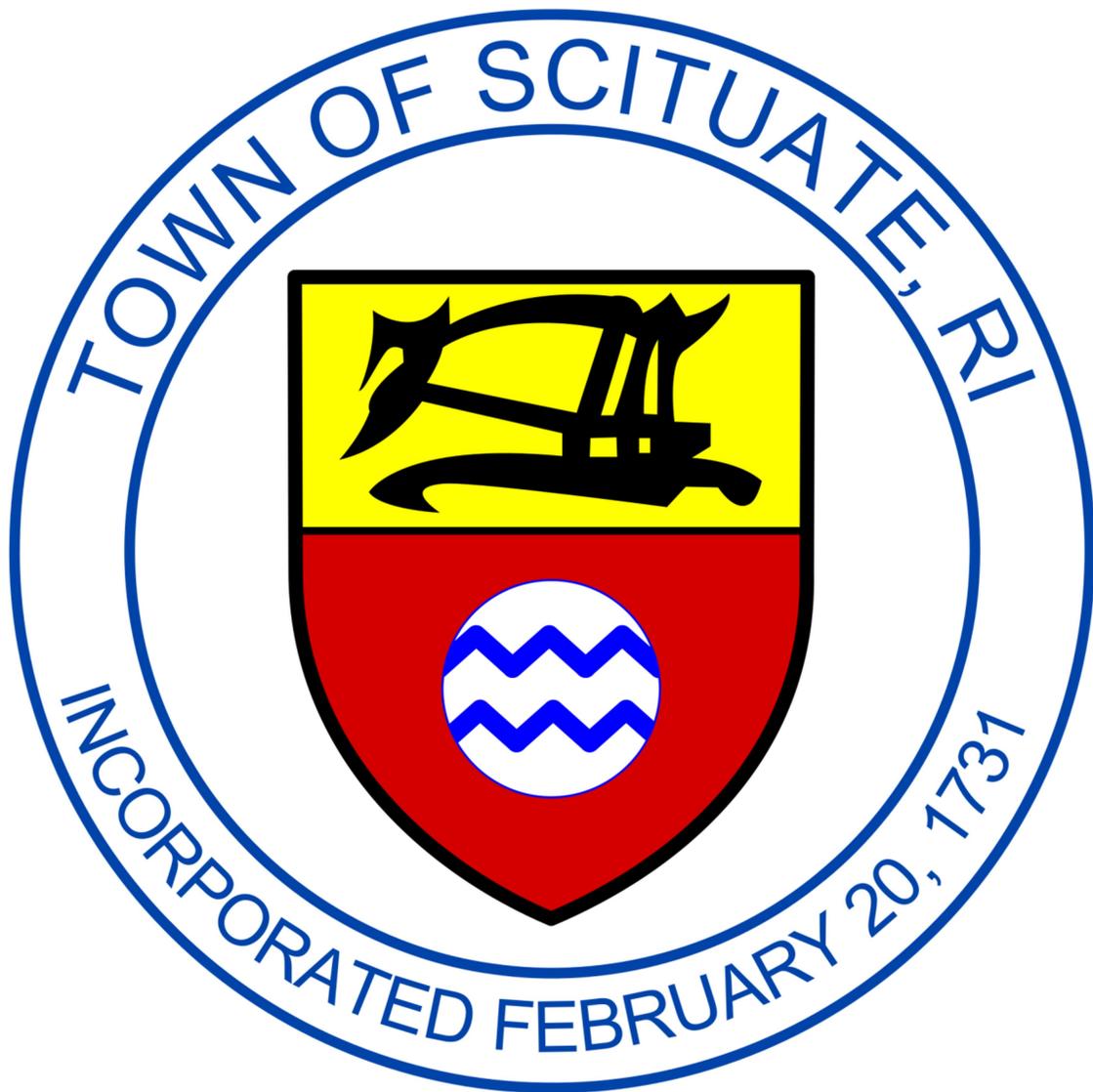
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Company

\_\_\_\_\_  
Date

Town of Scituate

Scituate Town Hall Generator – SEPTEMBER 2020

*50KW Diesel Generator Specifications*



## **STANDBY DIESEL GENERATOR SYSTEM:**

### **General**

Furnish and install on the newly constructed generator pad, a new diesel standby generator set, to replace the existing Superior 50R121 generator. The intent of this specification is to acquire a complete, factory prefabricated, standby power system that will require a minimum amount on site installation. The generator shall be custom fabricated to fit at the existing location, on the newly constructed pad, and connect to the existing wiring and conduits.

**The Town of Scituate shall remove the existing generator.** The supplier shall install the new generator at the existing location and secure and test. The contractor shall provide the fuel for testing and shall fill the tank after installation is complete.

### **Description**

The stand-by generator set shall consist of an engine driven generator assembly mounted on a steel skid, with all accessories required for proper automatic operation, including but not limited to:

- Battery, battery rack, battery cables
- Battery charger
- Engine controls
- Generator controls
- Fuel system
- Exhaust system
- Vibration isolators
- Cooling system
- Lubrication system
- Remote annunciator
- Emergency Stop Switch

### **Quality Assurance**

The stand-by generator set shall be the standard product of a manufacturer engaged exclusively in the production of stand-by power equipment and, which has had at least 10 years' experience in the manufacture of such equipment. The stand-by generator set shall be factory assembled and tested with all specified accessories installed and operational.

### **Warranty:**

The manufacturer shall warrant the equipment specified herein against defects for a period of one year from the time of final acceptance but not more than 15 months from the date of delivery. Warrantees from various component manufactures will not be acceptable so as to provide one source of responsibility for warranty problems.

### **Submittals:**

The supplier will provide 3 sets of technical documents for the review process.

### **Operation:**

The operation of this unit shall be automatic such that upon the closure of the remote starting contacts from the automatic transfer switch, the engine shall start and attain rated voltage and frequency within 10 seconds. All accessories shall be provided to assure starting within the above time frame under the ambient temperatures and conditions described herein.

If the engine should fail to start within 45-90 seconds (adjustable) the cranking shall cease and a failure to start indication shall be shown on the control panel. This shut down must be manually reset.

The engine generator set shall be capable of picking up full rated load in a single step upon startup with a voltage dip of no more than 20%. Thereafter the voltage shall be regulated within  $\pm 1\%$  by an automatic voltage regulator.

Upon restoration of normal power, the generator set shall continue to run unloaded for 1 to 30 minutes (adjustable) to cool down the engine.

If at any time during the above operations any of the herein described safety shut-down conditions occur, the engine generator set shall shut down and the appropriate fault indication shall be displayed on the control panel.

### **Engine:**

The engine shall be water cooled, 4-cylinder, 4 cycle, industrial type, diesel fueled, with a minimum displacement of 4.51 liters, and a rated RPM of not more than 1800. All ratings shall be for standard temperatures and pressures at the site elevation.

**In consideration of the town's use of its own personnel for maintenance, and in consideration of the availability of local parts sources, the engine shall be manufactured by John Deere or Cummins or Caterpillar or Kohler only.**

### **The Engine Shall be EPA Rated for Emergency Standby Service**

The engine shall be turbocharged with a unit mounted radiator and pusher fan capable of operating at full rated load and for the full duration of the power failure within an ambient temperature of 100° F without de-rating.

The engine shall be equipped with a complete fuel system including:

- Fuel injection system;
- Fuel filter;
- Flexible fuel connections;
- Fuel line solenoid valve;

Hand priming pump; and  
Double wall base tank.

As well as any other components normally supplied or recommended by the engine manufacturer for this application.

The lubrication system shall be of the full pressure type with an engine driven oil pump. It shall be equipped with replaceable element spin-on oil filters of a type and size recommended by the engine manufacturer. There shall be a low oil pressure cut out which will shut down the unit before damage can occur due to loss of oil pressure.

The engine shall be governed by a governor capable of maintaining engine speed from no load to full load within 1% of the governed speed of 1800 RPM.

The cooling system shall consist of a unit mounted radiator, a pusher fan, an engine mounted coolant circulating pump, a coolant thermostat and a duct flange adapter to discharge cooling air out of the enclosure. The cooling system shall be filled with a 50% ethylene glycol mixture.

The entire air intake system shall be filtered with a replaceable element filter of the type and quantity recommended by the engine manufacturer.

### **Mounting:**

The complete engine and generator assembly shall be mounted on a structural steel skid base designed to maintain proper alignment of the combination. Vibration isolators shall be provided in quantities recommended by the manufacturer between the engine generator and the base of the unit. Mounts must be included in the submittal package for final review and approval. The unit shall be certified to be free from damaging torsional vibrations of its synchronous speed.

### **Generator:**

*Ratings:* The generator shall be multi lead re-connectable and rated for continuous stand by service at 50KW, 50KVA, and 1.0 PF, 120/240 volts, 1 phase, 3 wire, 60 hertz, connected at 1800 RPM.

**The generator set shall be capable of the full 50KW output and not be de-rated because of the single-phase connection. If the de-rated generator output is less than 50KW, then a larger unit must be supplied to produce 50KW.**

*Type:* The generator shall be revolving field type, 4 pole, with brushless exciter and drip proof construction. The armature shall have a single bearing with a minimum B-10 life of 40,000 hours and shall be connected to the engine by a semi-flexible connection. The generator shall conform to all NEMA standards. *Insulation shall be class H.*

*Regulation:* Shall be electronic, PMG or similar for the use with nonlinear (VFD Pumps/UPS equipment) loads. Regulation shall be  $\pm 1\%$  from no load to full load. There shall be a voltage adjust rheostat to provide a  $\pm 10\%$  adjustment of the nameplate voltage. The generator shall be

designed so that if any part of the regulation system should fail, the generator set shall not exceed the system voltage. This ability shall be inherent in the design and shall not depend on overvoltage shut down features.

**Engine Jacket -Heater:**

A 1000-watt engine jacket heater with an adjustable thermostat shall be furnished and installed to maintain the engine jacket cooling water at a suitable temperature to ensure engine starting and the ability to attain rated load within 10 seconds. The heater shall be installed at the factory and shall operate on 120 volts.

**Battery:**

The starting battery shall be 12 volts. They shall be heavy duty lead acid type designed especially for industrial gas engine applications. The minimum ampere hour capacity shall be as recommended by the manufacturer but in no case less than 95 per battery. Suitable battery racks meeting all of the most current NEC regulations (480-8), shall be employed. *The battery racks shall be designed for full containment of the battery electrolyte or fluids in the event of case failure* thereby protecting the roof against harmful exposure. Cables shall be provided with the batteries so as to provide a neat assembly and shall be installed by the technician performing the startup services.

**Exhaust System:**

Provide a critical rated exhaust silencer complete with condensation drains when required of a size recommended by the generator set manufacturer, but in no case less than 3 inches. Provide a free-floating mount to minimize thermal stress to the manifold. The exhaust silencer shall be mounted within the enclosure and protected from contact with heat shielding.

**Base Mounted Fuel Tank:**

There shall be a diesel fuel tank supplied as an integral part of the base of the unit. The tank shall have a minimum capacity of 250 gallons. It shall be sized to run the generator for a minimum of 72 hours @ 75% capacity.

The fuel tank shall be installed in the generator manufacturer's factory and all fuel connections, vents, returns and fills shall be installed and tested prior to shipment. Field or dealer installed tank installations are not acceptable. This installation shall include but shall not be limited to the following:

- Double wall steel fuel tank of the rated capacity (must meet UL 142 standards);
- Enlarged steel skid base, full perimeter;
- Fuel lines including supply, return and vent lines;
- Rupture alarm in the interstitial tank space;
- Fuel fill and vent piping;
- Fuel level gauge; and
- Low fuel warning float switch.

All required appurtenances recommended or required by the manufacturer for a complete and correct installation shall be supplied and the entire assembly shall be factory primed and painted to protect against corrosion.

**Control Panel:**

Supply a generator mounted control and instrument panel constructed of 16-gauge steel with drip proof construction. This panel shall house the remote start and stop controls as well as full digital instrumentation of the engine and generator readouts as well as the safety shut down and pre-warning system as specified herein. This control panel shall contain the following data readouts:

AC volts  
AC amps  
Phase selector switch  
AC frequency

The control panel shall contain the following safety shutdowns and warnings:

Low engine oil pressure  
Engine overspeed  
High engine water temperature  
Over crank/failure to start  
Low water level  
Low water temperature  
Low battery  
System not in auto  
Generator running  
Common remote alarm contact

The control panel shall contain the following engine readouts:

Engine oil pressure  
Engine coolant temperature  
Battery voltage  
Total run time  
Engine RPM

The control panel shall also contain a three-position mode selector. These positions shall be as follows:

**Auto:** The generator set shall start up and run when the transfer switch calls through the remote starting contacts.

**Test:** The generator set will run when it is placed in this position unless one of the safety controls has been activated.

**Off:** The generator will not run in this position.

### **Proprietary Software, Tools and Licensing:**

The town of Scituate does not want to be required to use the manufacturers designated service personnel to do diagnostics, maintenance repairs and adjustments on its equipment. The need of using any proprietary software, programming/diagnostic tools or licenses to make any or all replacement of circuit boards, configuration changes of the controller or diagnostic or adjustments on the generator control system, or the automatic transfer switch, shall not be allowed. Any, and all, configuration changes shall be able to be made from the front panel of the controller.

Any, and all, passwords for access shall be inserted into the operation manual. The operator's manual shall contain detailed instructions on how to program the engine controller. If a vendor wishes an alternative method of compliance with this, he may supply a dedicated tool, or if there is no dedicated tool, a laptop computer to the town with all software loaded and configured, as well as unit configuration files. These devices shall be provided with all interconnecting adaptors and cables as well as licenses with no calendar or usage limits. He shall also supply the services of a service tech, for a minimum of four hours, on site, to teach the town's personnel how to use the configuration software.

### **Two Wire Start:**

The generator shall employ and use the industry standard two wire start (close to run) convention. Any other interconnection scheme between the automatic transfer switch and generator for communications and start signal shall not be allowed since these are generally proprietary and will not allow for flexibility of using equipment from different manufacturers in the future and will also not allow the connection of the *town's temporary portable generator* to the system if ever needed.

### **Line Circuit Breaker:**

The generator shall be equipped with a resettable line circuit breaker. A thermal magnetic breaker rated 225A with inverse time versus current response to protect the unit from damage due to overload. Field circuit breakers alone will not meet this specification. The breaker shall be mounted either in the connection box of the generator or in a separate generator mounted NEMA 1 enclosure. All connections between the generator and the breaker shall be accomplished at the factory to simplify field hook up and installation.

**The supplier shall be responsible to provide a generator that is 100% compatible with the existing location and pad. The breaker shall be located so the existing wiring can be reused, and the location of the new pad will not have to be modified.**

**Outdoor Weather Protective Enclosure:**

The complete engine generator shall be mounted within a fiberglass or properly coated aluminum weather protective enclosure. All accessories indicated in the specification, with the exception of the annunciator, shall be mounted.

The enclosure shall be manufactured using only the highest standard techniques. The enclosure shall be manufactured with hinged doors on two sides of the generator thereby providing ready access for servicing. Doors shall be equipped with locks to enhance security and the locks shall employ a uni-key system. The manufacturing schedule must include a layer of isocyanurate foam resulting in a minimum R9 thermal retention capability. The thermal layer is intended to improve jacket heater efficiency.

The enclosure must **have intake and exhaust airflow hoods designed to ensure proper cooling and ventilation while minimizing the migration of noise away from the generator.** The sound hoods may be external or internal and must be an integral part of the enclosure thereby ensuring permanence and added safety. Hoods must have expanded aluminum grilles at their openings to guard against entry and or damage due to foreign objects. The door openings must be flanged to maximize weather protection and the roof must be cambered to shed rain loads more readily. The enclosure shall be designed to completely cover the engine generator thereby providing weather protection for the entire system. The enclosure shall be produced and installed by the generator set manufacturer to insure compatibility of all systems.

**Remote Annunciator: Shipped Loose**

This panel shall have the following annunciation features:

Low oil pressure	Generator supplying load
Low oil pressure pre-alarm	Alarm horn and silence switch
Low coolant temperature	Lamp test switch
High water temperature	Switch not in auto
High water temperature pre-alarm	Emergency stop activated
Overspeed	Low battery
Over crank	High battery
Low coolant level	

Provide contacts for the specified faults on a separate terminal strip within the control panel for simple field hook up of the remote annunciator.

### **Automatic Load Transfer Switch (NON-SERVICE ENTRANCE RATED)**

The engine generator system will be provided with an automatic transfer switch.

The transfer switch shall be furnished as described herein with a full load current rating of 400 amperes. The switches shall be rated 2 pole, 3 wire, 60 Hz A.C. normal and emergency at 120/240 volts.

The transfer switch shall be capable of switching all classes of load, and shall be rated for continuous duty when installed in a non-ventilated enclosure that is constructed in accordance with Underwriters' Laboratories, Inc.

The transfer switch shall be double throw, actuated by a single electrical operator, momentarily energized, and connected to the transfer mechanism by a simple over-center type linkage with a total transfer time not to exceed one half second.

The normal and emergency contacts shall be positively interlocked mechanically and electrically to prevent simultaneous closing. Main contact shall be mechanically locked in both the normal and emergency positions without the use of hooks, latches, magnets or springs, and shall be silver tungsten alloy protected by arching contacts, with magnetic blowouts on each pole.

The transfer switches shall be equipped with a manual operator. The manual operator shall provide the same contact to contact transfer speed as the electrical operator to prevent flash-over from switching the main contacts slowly.

Engine starting contacts shall be provided to start the generating plant if any phase of the normal source drops below 75% of rated voltage, after an adjustable time delay period of three (3) to thirty (30) seconds to allow for momentary dips.

The transfer switches shall transfer to emergency, as soon as the voltage and frequency have reached 90% of rating.

After restoration of normal power on all phases to 90% of rated voltage, an adjustable time delay period of 0-30 minutes shall delay retransfer to normal power until it has time to stabilize.

If the emergency power source should fail during the timing period of the time delay, the delay shall be bypassed, and the switches shall return immediately to the normal source.

After the switches have re-transferred to normal, the engine generator shall be allowed to operate at no load for an adjustable period of time (0-5 minutes) to allow it to cool before shutdown.

The transfer switches shall include a test switch to simulate normal power failure, pilot lights on the cabinet door to indicate the switch position, and four auxiliary contacts on the main shaft; two closed on normal, the other two on emergency. The transfer switches shall include a load no-load exercise clock to allow the generator to run each week for a predetermined period of time. The purpose of this exercise is to ensure system integrity and to keep all moving engine parts properly lubricated.

The transfer switch specified herein shall be Asco 300 Series or approved equal. It shall be supplied with a NEMA 1 enclosure for mounting inside.

**Test:**

The supplier of the emergency power equipment shall provide coordination of the equipment installation at no additional cost to the owner. After completion of the installation the supplier shall send a factory trained service representative to inspect the completed installation and determine if it is acceptable and make any recommendations for changes should they be necessary. The representative shall also start and run the unit for a period of 2 hours and record during 30-minute intervals the following:

Engine water temperature  
Engine Oil pressure  
Battery charge rate  
AC volts  
AC amperes on all phases

This test shall be conducted using available building load for a period of 2 hours. The owner's personnel or duly authorized representatives shall observe the test. The supplier shall have the Electrical Contractor notify the Owner a minimum of three days in advance of the day and time the test will take place so they may schedule their time accordingly. After the test the unit will be left in operating condition and training of the owner's personnel will take place if so requested.

**Installation:**

The contractor shall be responsible for all required permits.

The new generator shall be installed in the location of the existing generator. The old generator shall be removed and moved to a location by the **Scituate DPW** after the vendor disconnects all wires to the old generator. The fuel shall be removed and disposed of properly. The tank shall be disposed of properly, or as directed by the Scituate DPW.

The installation shall consist of removing the existing pad and disposing of the materials properly. A new pad shall be constructed by the vendor, as per local codes-Min 6" thick, reinforced concrete and large enough to allow maintenance of the generator. The pad shall be at least 30" larger than the generator on all four sides of the generator. New

wiring and conduits shall be installed. All conductors shall be copper, and the installation shall conform to all applicable codes and manufacturers installation requirements.

The new 400A automatic transfer switch shall be installed in the location of the existing. It shall be connected to the generator as per manufacturer installation instructions and all applicable codes. The actual cutover to the new transfer switch shall be done after hours so as not to shut down the Town Hall during business hours. This shall be coordinated with the head of the DPW.

The remote annunciator and emergency stop switch shall be installed in a monitored area as directed by the head of the DPW.

After installation the fence shall be replaced, and the site cleaned. Any landscaping shall be restored to its original condition.

The contractor shall supply a 50KW trailer mounted diesel generator to backup the Town Hall while the work is being performed. It shall be wired to the existing ATS until the new ATS is installed, then it shall be wired to the new ATS until the new generator is online. The portable generator shall be properly grounded and shall be wired to start automatically from the ATS. The battery charger and jacket heater shall be powered. The town shall replace any fuel used if an actual power failure occurs. All fuel used for testing shall be the responsibility of the contractor.