



**CITY OF DELRAY BEACH  
100 NW 1<sup>st</sup> AVENUE, DELRAY BEACH, FL 33444**

**Invitation to Bid Construction No. 2016-133  
Replacement of Emergency Generator for Fire Rescue Station No. 5  
Project No. 2014-011**

<b>MAYOR</b>	<b>- CARY D. GLICKSTEIN</b>
<b>VICE MAYOR</b>	<b>- AL JACQUET</b>
<b>DEPUTY VICE MAYOR</b>	<b>- JORDANA JARJURA</b>
<b>COMMISSIONER</b>	<b>- MITCH KATZ</b>
<b>COMMISSIONER</b>	<b>- SHELLY PETROLIA</b>
<b>CITY MANAGER</b>	<b>- DONALD B. COOPER</b>

**Purchasing Department ♦ (561) 243-7161 ♦ [purchasing@mydelraybeach.com](mailto:purchasing@mydelraybeach.com)**

**CITY**  
**ITBC No. 2016-133**

<b>Title:</b>	<b>Replacement of Emergency Generator for Fire Rescue Station No. 5</b>
<b>Bidder Name:</b>	<b>ZABATT POWER SYSTEMS</b>

**Addenda Acknowledgement**

Bidder hereby acknowledges the receipt of the following addenda, which were issued by the City and incorporated into and made part of this ITBC. It is the sole responsibility of Bidder to ensure that all addenda have been received and receipt of each has been acknowledged. Failure to submit acknowledgement of each addendum issued may result in Bidder being deemed non-responsive.

<b>ADDENDA NUMBER</b>	<b>ADDENDA DATE</b>
Addendum No. 1	August 17, 2016
Addendum No. 2	August 19, 2016
Addendum No. 3	August 24, 2016

**Submission Deadline:** August 22, 2016, 2:00 P.M. ET

**Submissions Accepted Via:** BidSync, Delivery Service, or in Person

**Submit to:** City of Delray Beach  
Purchasing Division  
100 N.W. 1<sup>st</sup> Avenue  
Delray Beach, FL 33444

**Comments:** A facsimile copy will not be accepted as a sealed Bid.

**City of Delray Beach**  
**Confirmation of Receipt (Date/Time Stamp):**

## **SECTION 4: FORMS FOR BID**

Each Bidder must complete and submit the forms included in this Section 4.

- Form 1. Bidder's Submittal Signature Page
- Form 2. Public Entity Crimes
- Form 3. Drug-Free Workplace
- Form 4. Conflict of Interest
- Form 5. Schedule of Pricing
- Form 6. Genuine Bid
- Form 7. Bid Guaranty
- Form 8. Cone of Silence
- Form 9. Non-Collusion Affidavit
- Form 10. Other Required Information
- Form 11. Questionnaire
- Form 12. Acknowledgement of Addenda

**Form 1 - Bid Submittal Signature Page**

By signing this Form 1, Bid Submittal Signature Page, the Bidder certifies that it satisfies all legal requirements as an entity to do business with the City, including all Conflict of Interest and Code of Ethics provisions. By signing this Bid Bidder agrees to furnish and deliver all materials and to do and perform all work in accordance with the Contract Documents for the Project entitled:

**ITBC No. 2016-133**

**Replacement of Emergency Generator for Fire Rescue Station No. 5**

By signing this Form 1, Bidder acknowledges it has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as Bidder deems necessary. **Bidder warrants and represents that there are no defects, errors or inconsistencies in the plans, specifications or any of the Contract Documents and that the actual site conditions comport to the conditions set forth therein.**

Firm Name: Zabatt Power Systems

Street Address: 4612 Highway Ave, Jacksonville, FL 32254


Mailing Address (if different from Street Address): same as above

Telephone Number(s): 786-390-7855

Fax Number(s): 904-394-7446

Email Address: carlos.hernandez@zabatt.com

Federal Identification Number: 59-1889271

Signature  Date 8/19/14

J. MICHAEL SABATIER, PRESIDENT

Printed Name and Title

By signing this document, the Bidder has examined copies of all the Agreement documents and addenda and agrees to all terms and conditions of this ITBC and the resulting agreement. The Bidder agrees, if this Bid is accepted: (1) Bidder will enter into an Agreement with the City to complete all Work as specified or indicated in this ITBC; (2) for the Price Bidder submitted on Form 6-Bid Pricing; (3) within the specified time indicated in this ITBC; and (4) in accordance with the all the terms and conditions of this ITBC.

**THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF BIDDER TO BE BOUND BY THE TERMS OF ITS BID. FAILURE TO SUBMIT THIS FORM EXECUTED BY AN AUTHORIZED REPRESENTATIVE WHERE INDICATED SHALL RENDER THE BID NON-RESPONSIVE. THE CITY MAY, HOWEVER, IN ITS SOLE DISCRETION, ACCEPT ANY BID THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE BIDDER TO THE TERMS OF ITS BID.**

**Signature Authority**

Indicate below Bidder's type of organization and provide the required documentation as applicable to demonstrate that the executor of Bidder's Bid is duly authorized to execute on behalf of, and as the official act of, Bidder.

Select	Type of Organization	Officer Who Signed Proposal Submittal Signature Page	Required Authorizing Documentation
<input checked="" type="checkbox"/>	Corporation	President, Vice President, or Chief Executive Officer	None
<input type="checkbox"/>	Corporation	Director, Manager, or other title	Corporate resolution
<input type="checkbox"/>	Limited Liability Company (LLC) – Member-Managed	Member	Articles of Organization or Operating Agreement
<input type="checkbox"/>	Limited Liability Company (LLC) – Manager-Managed	Manager	Articles of Organization or Operating Agreement
<input type="checkbox"/>	Limited Partnership	General Partner	Document demonstrating the legal authority to bind the Limited Partnership
<input type="checkbox"/>	Partnership	Partner	None
		CEO, Director, Manager or other title	Authorizing documentation
<input type="checkbox"/>	Individual	Individual	None

☒ Documentation is not required.

☐ The required authorizing documentation is included with Bid.

**Form 2 - Public Entity Crimes****NOTIFICATION OF PUBLIC ENTITY CRIMES LAW**

Pursuant to Section 287.133, *Florida Statutes*, you are hereby notified that a person or affiliate who has been placed on the convicted Bidders list following a conviction for a public entity crime may not submit a Bid on a Bidder to provide any goods or services to a public entity; may not submit a Bid on a Bidder with a public entity for the construction or repair of a public building or public work; may not submit Bids on leases or real property to a public entity; may not be awarded or perform work as a Bidder, supplier, sub-Bidder, or consultant under a Bidder with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 [F.S.] for Category Two [\$35,000.00] for a period of thirty-six (36) months from the date of being placed on the convicted Bidders list.

Acknowledged by:

**Zabatt Power Systems**

Firm Name (print)



Signature

Date

8/19/14

Printed Name and Title

J. MICHAEL SABATIER, PRESIDENT

### Form 3 - Drug-Free Workplace

If identical tie bids exist, preference will be given to the vendors who submit a certification with their bid/Bid certifying they have a drug-free workplace in accordance with Section 287.087, Florida Statutes. The drug-free workplace preference is applied as follows:

**IDENTICAL TIE BIDS:** Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program.

As the person authorized to sign this statement, I certify that this firm complies fully with the following requirements:

- 1) This firm publishes a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) This firm informs employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3) This firm gives each employee engaged in providing the commodities or Bidder services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), this firm notifies the employees that, as a condition of working on the commodities or Bidder services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
- 5) This firm imposes a sanction on or requires the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) This firm will continue to make a good faith effort to maintain a drug-free workplace through implementation of this section.

**Zabatt Power Systems**

Firm Name (print)

Signature

Date

Printed Name and Title

### Form 4 - Conflict of Interest Disclosure Form

The award of this ITBC is subject to the provisions of Chapter 112, Florida Statutes and Palm Beach County Ordinance Section 2-443. All Bidders must disclose: the name of any officer, director, or agent who is also an employee or relative of an employee of the City.

Furthermore, all Bidders must disclose the name of any City employee or relative(s) of a City employee who owns, directly or indirectly, an interest in the Bidders firm or any of its branches.

The purpose of this disclosure form is to give the City the information needed to identify potential conflicts of interest for key personnel involved in the award of this ITBC.

The term "conflict of interest" refers to situations in which financial or other personal considerations may adversely affect, or have the appearance of adversely affecting, an employee's professional judgment in exercising any City duty or responsibility in administration, management, instruction, research, or other professional activities.

Select the statement below which applies to Bidder and, if applicable attach supporting information:

☒ To the best of our knowledge, the undersigned firm has no potential conflict of interest as defined in Chapter 112, Florida Statutes and Section 2-443, Palm Beach County Code of Ordinances.

☐ The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest as defined in Chapter 112, Florida Statutes and Section 2-443, Palm Beach County Code of Ordinances.

Acknowledged by:

**Zabatt Power Systems**

Firm Name (print)

Signature

Date

Printed Name and Title

Disclose the name of any officer, director or agent of Bidder who is also an employee of the City. Disclose the name of any City employee who owns, directly or indirectly, any interest in the Bidder's firm or any of its branches. If no conflicts of interests exist enter N/A.

**NONE**



**Form 5 - Schedule of Pricing**

- A. PRICE:** Bidder must submit bid pricing per the requirements and specification detailed in this ITBC.

Bid Items	Measurements	Unit List	Payment
Item No. 1 – Generator Purchase	Qty 1	Each	\$ 38,736.00
Item No. 2 – Scope of Work / Labor	Qty 1	Lump sum	\$ 65,733.00
Item No. 3 – Owner's Contingency Allowance		Lump sum	\$10,000.00
Item No. 4 – Indemnification		Lump sum	\$10.00

**GRAND TOTAL BASE BID**\$ 114,479.00

**NOTE:** Bidder shall include in his bid all costs associated with materials, handling, delivery and storage. Unless where noted otherwise, provide all labor, material, equipment and incidentals necessary for complete Work. Successful Bidder shall warrant and guarantee all materials and workmanship for a period of one year from date of final completion and acceptance by City.

**NOTE:** Bid pricing must include all costs and fees associated with demolition.

- B. INDEMNIFICATION:** The City will pay to the Contractor the specific consideration of ten dollars and other good and valuable consideration as specific consideration for the indemnification provided herein. Contractor acknowledges that the Grand Total bid price above includes said consideration for the indemnification provision.

☐ Yes

☐ No

- C. JOINT BIDDING, CO-OPERATIVE PURCHASING AGREEMENT:** Will extend same price, terms, and conditions of this bid to other Palm Beach, Martin and Broward County Governmental agencies?

☐ Yes

☐ No
**D. BID INFORMATION WAS OBTAINED FROM:**
☐ BidSync

☐ Newspaper Ad

☐ City Hall

☐ Other (specify) \_\_\_\_\_

### Schedule of Pricing

#### TRENCH SAFETY ACT Florida Statutes Section 553.60 et seq.

##### "Trench Safety Act" Compliance

Bidder acknowledges that the Florida Trench Safety Act, Section 553.60 et. seq., which became effective October 1, 1990, shall be in effect during the period of construction of the project. The Bidder by signing and submitting a Bid is, in writing, assuring that it will perform any trench excavation in accordance with the applicable trench safety standards. The Bidder further identifies the following separate item of cost of compliance with the applicable trench safety standards as well as the method of compliance.

<u>Method of Compliance</u>	<u>Cost</u>
N/A - will not be trenching deeper than 3ft	

Bidder acknowledges that the Trench Safety Act Method of Compliance Cost shown above is included in the applicable items of its Bid and in the Grand Total bid price. Failure to complete the above may result in the Bid being deemed non-responsive.

The Bidder is, and the City and Engineer are not, responsible to review or assess City's safety precautions, programs or costs, or the means, methods, techniques or technique adequacy, reasonableness of cost, sequences or procedures of any safety precaution, program or cost, including but not limited to, compliance with any and all requirements of Florida Statute Section 553.60 et. seq. cited as the "Trench Safety Act". Bidder is, and the City and Engineer are not, responsible to determine if any safety or safety related standards apply to the project, including, but not limited to, the "Trench Safety Act".

**Form 6 – Genuine Bid**

By signing this Form 7, Genuine Bid, Bidder confirms this Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over the City; no City official nor any City employee has a direct or indirect interest in said bid, in the supplies or work to which it relates, to any person associated with the firm performing the work, or to the profits resulting from the work.

Firm Name: Zabatt Power Systems

Street Address: 4612 Highway Ave, Jacksonville, FL 32254

Mailing Address (if different from Street Address): same as above

Telephone Number(s): 904-384-4505

Fax Number(s): 904-394-7446

Email Address: sales@zabatt.com

Federal Identification Number: 59-1889271

Signature  Date 8/19/16

J. MICHAEL SABATICH, PRES

Printed Name and Title

### Form 7 – Bid Guaranty

The undersigned Bidder agrees as follows:

Accompanying this Bid is a certified check, cashier's check or bid bond (5% of total Bid Price) meeting the requirements of the Contract Documents for \$ 5,724.00 payable to the City of Delray Beach which is to be forfeited if, in the event that this Bid is accepted, the undersigned shall fail to execute the contract and furnish satisfactory Contract Security and furnish insurance certificates under the conditions and within the time specified in the Instructions to Bidders; otherwise, said certified check, cashier's check or bid bond is to be returned as provided herein. NOTE: Bidder must use the Bid Bond forms on the following pages.

☒ Bid Security in the amount of 5% of the Bidders maximum bid price is attached.

ZABATT POWER SYSTEMS INC.  
Firm Name (print)  
[Signature] 9/1/16  
Signature Date  
J. MICHAEL SABATIER, PRESIDENT  
Printed Name and Title

**BID BOND**

STATE OF FLORIDA                     }  
COUNTY OF Duval                   } SS

Zabatt Engine Services Inc dba

KNOW ALL MY BY THESE PRESENTS that Zabatt Power Systems Inc  
as Principal, and Sentry Insurance a Mutual Company as surety, are held and firmly bound  
unto the City of Delray Beach, Florida, hereinafter called the City in the penal sum of \_\_\_\_\_  
Five Thousand Seven Hundred Twenty-Four and 00/100----- dollars (\$5,724.00 ) lawful money of the  
United States, for the payment of which sum will and truly to be made, we bind ourselves, our  
heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that whereas the Principal has  
submitted the accompanying bid, dated 9/1/2016, for project titled:

**ITBC No. 2016-133**  
**Replacement of Emergency Generator for Fire Rescue Station No. 5**

NOW, THEREFORE,

- (a) It is a condition precedent to the submission of said bid that a certified check, cashier's check or bid bond in the amount of five percent (5%) of the base bid be submitted with said bid as a guarantee that Bidder would, if awarded the contract, enter into a written contract with the City for the completion of the Work specified in the Contract Documents for the amount indicated in the Bid.
- (b) If the Principal shall not withdraw said bond within (90) days after date of the same, and shall within fifteen (15) days after the prescribed forms are presented to him for signature, enter into a written contract with the City in accordance with the bid as accepted, and give bonds with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract, then the above obligation shall be void and of no effect, otherwise the sum herein stated shall be due and payable to the City and the surety herein agrees to pay said sum immediately upon demand of the City in good and lawful money of the United States of America as liquidated damages for failure thereof of said principal.

IN WITNESS WHEREOF, the above-bounded parties executed this instrument under their  
several seals, this 1st day of September, 2016 the name and corporate  
seal of each corporate party being hereto affixed and these presents duly signed by its  
undersigned representative, pursuant to authority of its governing body.

I N/A, on behalf of  
(surety person)  
N/A have read and examined  
(surety company)

examined the Performance and Payment Bonds attached to ITBC No. 2016-133.

N/A  
Signature

Date: N/A

WITNESS: (If Sole Ownership or Partnership, two (2) Witnesses required). (If Corporation, Secretary Only will attest and affix seal)

**WITNESSES:**

By: Virginia Bayer  
Printed Name: Virginia Bayer  
By: Henry Carpenter  
Printed Name: HENRY CARPENTER

**PRINCIPAL**

Zabatt Engine Services Inc dba Zabatt Power Systems Inc

(firm name)

By: [Signature]  
(Signature of Authorized Officer)

Print Name: J. MICHAEL SABATIER

Title: PRESIDENT

Business Address:

4612 HIGHWAY AVE  
JACKSONVILLE, FL 32254

CORPORATE SEAL:

**WITNESSES:**

By: Rita M. Ginder

Print Name: Rita M. Ginder

By: Sue Bembenek

Print Name: Sue Bembenek



**SURETY:**

Sentry Insurance a Mutual Company  
(Surety firm name)

By: Dorene R. Bialas

(Signature, Attorney-in-Fact)

Printed Name: Dorene R. Bialas

**Business Address:**

1800 North Point Drive

Stevens Point, WI 54481

**Name of Local Insurance Agency**

Sentry Insurance a Mutual Company  
Fleming Island, FL 32003

# POWER OF ATTORNEY

No. 67-31981-25



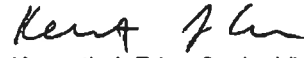
Know all men by these presents, that Sentry Insurance a Mutual Company, a corporation duly organized under the laws of the State of Wisconsin, and having its principal place of business in the City of Stevens Point, State of Wisconsin, does hereby make, constitute and appoint JOHN T. BAUMAN, BEVERLY R. BEIGEL, DORENE R. BIALAS, RITA M. GINDER, CHERYL M. JISKO, ANDY M. KURSZEWSKI, JENNIFER M. MURPHY, JENNIFER L. THAUER, MICHELLE M. THAUER, AND LYNDA L. WACHOWIAK, as its true and lawful Attorneys-in-Fact, for it, and in its name, place and stead, with full power and authority to sign, execute, acknowledge and deliver for and on its behalf as Surety, any and all bonds with an effective date on or after June 5, 2015.

Signed:

  
Peter G. McPartland, Chairman of the Board,  
President and Chief Executive Officer  
SENTRY INSURANCE A MUTUAL COMPANY



Attest:

  
Kenneth J. Erler, Senior Vice President, Chief  
Administrative Officer, General Counsel and  
Corporate Secretary  
SENTRY INSURANCE A MUTUAL COMPANY

STATE OF WISCONSIN }  
COUNTY OF PORTAGE } ss:

I, Shelley M. McEachen, Notary Public, do hereby certify that Peter G. McPartland, Chairman of the Board, President and Chief Executive Officer, and Kenneth J. Erler, Senior Vice President, Chief Administrative Officer, General Counsel and Corporate Secretary, of Sentry Insurance a Mutual Company, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such Chairman of the Board, President and Chief Executive Officer and the Senior Vice President, Chief Administrative Officer, General Counsel and Corporate Secretary, appeared before me this day in person and acknowledged that they signed, sealed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and official seal this 5th day of June, 2015.



  
Shelley M. McEachen  
My Commission expires 10/17/17.

## AUTHORIZATION

I, Kenneth J. Erler, Senior Vice President, Chief Administrative Officer, General Counsel and Corporate Secretary of Sentry Insurance a Mutual Company, hereby certify that Sentry Insurance a Mutual Company is duly licensed to transact fidelity and surety business in all states of the United States of America, that the foregoing Power of Attorney is a correct and true copy of the original Power of Attorney, and that said Power of Attorney has not been revoked. I further certify that the following is a true and exact copy of a resolution passed by the Board of Directors of Sentry Insurance a Mutual Company at a meeting held by said Board, a quorum being present and voting on May 7, 1970, which resolution is still in effect:

RESOLVED: That the President, the Vice President or the Treasurer of this Corporation shall have authority to appoint in writing such attorneys-in-fact as the business of the Corporation may require, and to authorize such attorneys-in-fact, and each of them to execute on behalf of the Corporation, any bonds, recognizances, stipulations, contracts of indemnity and other undertakings of like character, or to exercise any lesser number of said powers as hereinbefore set forth, and BE IT FURTHER RESOLVED: That said appointments shall be attested by the Secretary or an Assistant Secretary of this Corporation under its seal. The signature of the Secretary or any Assistant Secretary to certified copies of such powers of attorney may be original or facsimile, and when the corporate seal is affixed thereto, any third party may rely on said certified copies of powers of attorney as the act and deed of this Corporation. The President, Vice President, or Treasurer may revoke any appointment made pursuant hereto, and revoke any and all authority conferred by any such appointment.

Given under my hand and official seal this 1st day of September, 2016.

Attest:



  
Kenneth J. Erler, Senior Vice President, Chief Administrative  
Officer, General Counsel and Corporate Secretary  
Sentry Insurance a Mutual Company



## Form 8 - CONE OF SILENCE

The Palm Beach County Lobbyist Registration Ordinance (Sections 2-351 through 2-357 of the Palm Beach County Code of Ordinances) is applicable in the City of Delray Beach. Section 2-355 of the Palm Beach County Lobbyist Registration Ordinance includes a "Cone of Silence" provision that limits communication during the City's procurement process in regard to this RFP, which provides as follows:

**Sec. 2-355. Cone of silence.**

- (a) Cone of silence means a prohibition on any communication, except for written correspondence (with the Purchasing Department), regarding a particular request for proposal, request for qualification, bid, or any other competitive solicitation between:
  - (3) Any person or person's representative seeking an award from such competitive solicitation; and
  - (4) Any county commissioner or commissioner's staff, any member of a local governing body or the member's staff, a mayor or chief executive officer that is not a member of a local governing body or the mayor or chief executive officer's staff, or any employee authorized to act on behalf of the commission or local governing body to award a particular contract.
- (b) For the purposes of this section, a person's representative shall include but not be limited to the person's employee, partner, officer, director, consultant, lobbyist, or any actual or potential subcontractor or consultant of the person.
- (c) The cone of silence shall be in effect as of the deadline to submit the proposal, bid, or other response to a competitive solicitation. The cone of silence applies to any person or person's representative who responds to a particular request for proposal, request for qualification, bid, or any other competitive solicitation, and shall remain in effect until such response is either rejected by the county or municipality as applicable or withdrawn by the person or person's representative. Each request for proposal, request for qualification, bid or any other competitive solicitation shall provide notice of cone of silence requirements and refer to this article.
- (d) The provisions of this article shall not apply to oral communications at any public proceeding, including pre-bid conferences, oral presentations before selection committees, contract negotiations during any public meeting, presentations made to the board or local municipal governing body as applicable, and protest hearings. Further, the cone of silence shall not apply to contract negotiations between any employee and the intended awardee, any dispute resolution process following the filing of a protest between the person filing the protest and any employee, or any written correspondence at any time with any employee, county commissioner, member of a local municipal governing body, mayor or chief executive officer that is not a member of the local municipal governing body, or advisory board member or selection committee member, unless specifically prohibited by the applicable competitive solicitation process.
- (e) The cone of silence shall not apply to any purchases made in an amount less than the competitive bid threshold set forth in the county purchasing ordinance (County Code, chapter 2, article III, division 2, part A, section 2-51 et seq.) or municipal ordinance as applicable.
- (f) **The cone of silence shall terminate at the time the board, local municipal governing body, or a county or municipal department authorized to act on behalf of the board or local municipal governing body as applicable, awards or approves a contract, rejects all bids or responses, or otherwise takes action which ends the solicitation process.**
- (g) Any contract entered into in violation of the cone of silence provisions in this section shall render the transaction voidable.

By signing below, Bidder agrees to abide by the restrictions in this Cone of Silence.

Signature:  Date: 8/19/16

Printed Name: J. MICHAEL SABATINO Title: PRES

## Form 9 – Non-Collusion Affidavit

STATE OF FLORIDA

)SS

COUNTY OF DUVAL )

J. MICHAEL SABATICK being first duly sworn, deposes and states that:  
(Name)

- (1) He / She is the PRESIDENT OF ZABATT  
(Owner, Partner, Officer, Representative or Agent)
- (2) He / She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representative, employees or parties in interest, including this affidavit, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted; or to refrain from bidding in connection with such Contract; or have in any manner, directly or indirectly, sought by agreement or collusion, or communications, or conference with any Bidder, firm, or person to fix the price or prices in the attached Bid or any other Bidder, or to fix any overhead, profit, or cost element of the Bid Price or the Bid Price of any other Bidder, or to secure through any collusion conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Contract;
- (5) The price of items quoted in the attached Bid are fair and proper and are not tainted by collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any other of its agents, representatives, owners, employees or parties in interest, including this affidavit.

By: [Signature]Print Name: J. MICHAEL SABATICKSubscribed and sworn to before me this 19th day of August, 2016.

[Signature]  
Signature and Stamp of Notary Public

My Commission Expires: \_\_\_\_\_



**LILIA MARIE SMITH**  
MY COMMISSION # FF 132421  
EXPIRES: July 25, 2018  
Bonded Thru Budget Notary Services

**Form 10 - INFORMATION REQUIRED OF BIDDER****BIDDER'S GENERAL INFORMATION:**

Bidder shall furnish the following information. Failure to comply with this requirement will render Bid non-responsive and may cause its rejection. Additional sheets shall be attached as required.

- (1) Bidder's full and complete legal name including any dba and address:  
 \_\_\_\_\_ Zabatt Power Systems \_\_\_\_\_  
 \_\_\_\_\_ 4612 Highway Ave \_\_\_\_\_  
 \_\_\_\_\_ Jacksonville, FL 32254 \_\_\_\_\_  
 \_\_\_\_\_
- (2) Bidder's Federal Identification Number: 59-1889271
- (3) Bidder's telephone number: 904-384-4505
- (4) Bidder's Representative and contact for this ITBC:  
 Name: Carlos Hernandez  
 Phone: 786-390-7855  
 Email: carlos.hernandez@zabatt.com
- (5) Number of years as a Contractor in this type of work: 38
- (6) Names and titles of all officers of Bidder's firm:  
 \_\_\_\_\_  
 \_\_\_\_\_ Jose Sabatier, CEO \_\_\_\_\_  
 \_\_\_\_\_ J. Michael Sabatier, President \_\_\_\_\_  
 \_\_\_\_\_ Sandra Sabatier, Secretary \_\_\_\_\_  
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 \_\_\_\_\_
- (7) Name, address, and telephone number of surety company and agent who will provide the required bonds on this contract:  
SENTRY INSURANCE  
1800 WURTH POINT DR.  
STEVENS POINT, WI 54481  
800-473-6879
- (8) Principal Materials Manufacturers and Subcontractors. This proposal is being submitted by the hereinafter stated Contractor who proposes to perform work specified and shown on the Drawings. The Bid Proposal shown on the preceding page(s) has been calculated

and tabulated using basic material prices. The following is a list of material manufactures and subcontractors whose materials and services said Contractor propose to furnish and utilize if the awarded an Agreement for the work specified herein and shown on the Plans. It is understood that the following list is not complete but includes the names of manufactures of the principal components and subcontractors supplying principal services to said project. It is also understood that if awarded a Contract, the Contractor will furnish the materials of the manufactures and utilize the services of the subcontractors stated herein and that if for any reason whatsoever Contractor wishes to substitute materials or subcontractors he shall request permission in writing from the City stating fully the reason for making such a request prior to ordering same.

All of said manufactures or their authorized vendors have been made aware of all the appropriate portions of the Contract Documents and agree that their materials will meet all of the requirements stated therein and that deliveries will be scheduled so as not to impede the progress of the work.

Materials:

## Manufacturer

100kw Generator

Generac Corp

400A Transfer Switch

ASCO, Emerson

Subcontractors:

## Name

## Primary Duties

Signature of Bidder

By:

Print Name: J. MICHAEL SMITH JR

[Remainder of page intentionally left blank]

## Form 11 - QUESTIONNAIRE

The undersigned guarantees the truth and accuracy of all statements and answers herein contained.

1. Identify the last project similar to the work described in this ITBC that Bidder has completed (provide the project name, owner's name, and location).

City of Leesburg Reclamation  
City of Leesburg  
1600 CR 470  
Okahumpka, FL 34762

2. Has Bidder ever failed to complete work awarded. If yes, identify the project, where it was located, and why Bidder did not complete the work?

None

3. Provide three client references, either individuals or corporations, for which Bidder has performed work and who are agreeable to respond to the City's request for feedback.

**Client Reference 1**

Client Name: City of Leesburg  
Work Performed:  
sales & installation of a 125kw  
diesel genset

Contact Name: **Jerrill Robison**  
Contact Telephone: **352-728-9786 x2452**  
Contact Email:  
**jerrill.robison@leesburgflorida.gov**

**Client Reference 2**

Client Name: City of Vero Beach  
Work Performed:  
Installed new 250kw generator w/  
600A ATS

Contact Name: **Heather McCarty**  
Contact Telephone: **772-978-5471**  
Contact Email: **HMcCarty@covb.org**

**Client Reference 3**

Client Name: **Lucien Wav**  
Work Performed: **Installed new 180kw generator**  
Contact Name: **Richard Village**  
Contact Telephone: **407-875-2221**  
Contact Email: **rsvillage@ocsflorida.com**

4. List the following information concerning all contracts on hand as of the date of submission of this proposal. (In case of co-venture, list the information of all co-venturers).

Name of Project	Owner	Contract Value	Contract Date/Completion Date
NeuLife	NeuLife	\$145,997	Aug 2016 / Dec 2016

5. Has Bidder personally inspected the proposed work site and conditions?

Yes, attended the Mandatory Pre-Bid conference on August 17, 2016

6. Does Bidder have a complete plan for its performance?

Yes

7. Will Bidder sublet any part of this work? If yes, provide details of which portions will be sublet.

No

8. What equipment does Bidder own that is available for the work? (Attach additional sheets as necessary).

Item	Description
1	Company owned service truck
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

9. What equipment will Bidder purchase for the proposed work? (Attached additional sheets as necessary).

Item	Description
1	none known, or expected
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

10. What equipment does Bidder plan to rent for the proposed work? (Attached additional sheets as necessary).

Item	Description
1	possibly a crane and/or forklift to offload and set generator
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

11. What materials does Bidder plan to utilize for the proposed work? (Attach additional sheets as necessary).

Item	Manufacturer	Material
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

12. What subcontractor(s) will Bidder utilize for the proposed work, and what are the duties of each subcontractor? (Attached additional sheets as necessary).

Item	Subcontractor	Duties
1	None	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		



(If Sole Ownership or Partnership, two Witnesses required. If Corporation, Secretary Only will attest and affix seal)

**WITNESSES:**

By: Edwin Vergara  
Printed Name: Edwin Vergara

By: Matthew Crumby  
Printed Name: Matthew Crumby

Corporate Seal

**BIDDER**

ZABATT POWER SYSTEMS, INC.  
(Bidder name)

By: [Signature]  
(Signature of Authorized Officer)

Printed Name: J. MICHAEL SABATIER  
Title: PRESIDENT

### Form 12 - Acknowledgment of Addenda

The Bidder hereby acknowledges the receipt of the following addenda, which were issued by the City and incorporated into and made part of this ITBC. The Bidder acknowledges that it is solely responsible for ensuring that it is aware of, and in receipt of, all addenda.

ADDENDA NUMBER	ADDENDA DATE
Addendum No. 1	August 17, 2016
Addendum No. 2	August 19, 2016
Addendum No. 3	August 24, 2016

**Zabatt Power Systems**

Bidder (firm name) Edwin Vergara 8/29/16  
 Signature Edwin Vergara - Sales Date  
 Printed Name and Title

Section2 – Item 2 – Part C:

**Qualifying Project #1:**

- i. Project Owner: SMA Services
- ii. Contact Name: Scott Clark
- iii. Contact email: ph 727-439-4157
- iv. Project Location: Deland Inn  
350 E. International Speedway  
Deland, FL 32724
- v. Dates of Project: Start – May, 2015 (order date)  
End – Nov, 2015
- vi. Description:

**Installation – Scope of Work (License # EC13006469)**

- Expand existing generator concrete pad
- Disconnect and remove existing generator
- Install new 200kW, 480V, three phase diesel generator with sub-base tank
- New generator to have (1) 60A, (1) 150A, (1) 250A circuit breakers
- Wire existing wiring to generator 60A and 150A circuit breakers
- Install new 250A, 480V, 3phase, automatic transfer switch to add additional selected circuit
- Install new 250A, 480V, 3phase circuit panel for freight elevator, one RTU
- Install new step down 480V to 208V transformer
- Install new 150A, 208V, 3phase ,circuit panel for walk-in cooler, lighting circuits, outlet circuits
- Install new 250A circuit in main distribution panel to supply utility power to new 250A automatic transfer switch
- Relocate selected circuits to new circuits
- Install new relay to place new 250A ATS in neutral position only when fire pump is running under generator power
- Install battery charger circuit
- Install new remote annunciator panel
- Supply crane and rigging
- Obtain electrical permit
- Quote includes: labor, material, permitting, crane

**Qualifying Project #2:**

- i. Project Owner: City of Daytona Beach
- ii. Contact Name: Rick Doyle
- iii. Contact email: DoyleR@codb.us
- iv. Project Location: Engineering Division  
950 Bellevue Ave  
Daytona Beach, FL 32114
- v. Dates of Project: Start – March, 2016 (order date)  
End – Aug, 2016

vi. Description:

**Installation – Scope of Work (License # EC13006469)**

- Install new Pre-Cast concrete pad
- Disconnect and remove existing generator
- Disconnect and remove existing transfer switch
- Install new 80kW, 120/240V, 3ph NG with LPG back-up dual fuel generator w/ block heater
- Install new 400A non-service rated 120/240V, 3phase, 3pole, automatic transfer switch
- Install isolator pads between concrete pad and generator main frame
- Power outage is allowed to be completed during business hours of 8am – 5pm, Monday thru Friday (will have a minimum one week power outage notice)
- Supply all labor and material required to complete project per National Electrical code
- Obtain necessary permit
- Install new 1000 gallon LPG tank (initial fill included) and connection to generator
- Install new NG piping and connections to generator from gas meter  
(Teco to install new gas meter if necessary)
- Quote includes: labor, material, crane and rigging, and permit

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

**STATE OF FLORIDA**  
**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**  
**CONSTRUCTION INDUSTRY LICENSING BOARD**

LICENSE NUMBER

GBC1257077

The BUILDING CONTRACTOR  
Named below IS CERTIFIED  
Under the provisions of Chapter 489 FS.  
Expiration date: AUG 31, 2018

SIEGEL, JEREMY ASHER  
ZABATT INC  
14505 AMELIA COVE DRIVE  
JACKSONVILLE FL 32226



ISSUED: 07/14/2016

DISPLAY AS REQUIRED BY LAW

SEQ # L1607140000864



Division of Zabatt, Incorporated  
4612 Highway Avenue  
Jacksonville, FL 32254  
PH: 904 384 4505  
FX: 904 394 7446  
[www.zabatt.com](http://www.zabatt.com)

Jacksonville

Orlando

Tampa

09/01/16

RE: Letter of Intent for "ITBC 2016-133 Replacement of Emergency Generator at Fire Station No. 5"

ATTN: Ryan Lingholm, [lingholmr@mydelraybeach.com](mailto:lingholmr@mydelraybeach.com)

Section 2 – Item 3 – Part A "Letter of Intent"

**Installation – Scope of Work (License # EC13006469)**

- Demolition of Structures and Electrical to be performed as shown and described in dwgs PR-1 & A-1
- Remove existing landscaping as required and replenish as needed
- Existing walls and/or structures not scheduled for demolition will be protected or restored to like manner
- Install new Generator concrete pad
- Build new Masonry walls with Aluminum swing gate to protect Generator as described in dwg A-2
- Construction work to be completed as described in dwg A-2
- Install new 100kW, 208V, three phase Dual fueled (Natural Gas/LP Vapor) Generator
- Install new 400A, 208V, 3phase, 3pole, Service Entrance Rated NEMA 3R Automatic Transfer Switch
- Install new remote Annunciator panel and remote Emergency Stop push button
- All work performed is NOT to interfere or disrupt the operation and function of the Fire Station
- Supply all labor and material required to complete project per National Electrical Code
- Supply crane and rigging
- Obtain electrical permit
- Quote includes: labor, material, permitting, crane
- Quote excludes: LP Tank, Natural Gas meter, regulator, plumbing, and connections

**Contact Information:**

Carlos Hernandez  
Sales Rep  
cell: 786-390-7855  
[carlos.hernandez@zabatt.com](mailto:carlos.hernandez@zabatt.com)

Zabatt Power Systems  
4612 Highway Ave  
Jacksonville, FL 32254

Section2 – Item 3 – Part B: Statement of Organization

- i. Full Legal Name: Zabatt Power Systems
- ii. Address: 4612 Highway Ave, Jacksonville, FL 32254
- iii. Phone: 904-384-4505
- iv. Fax: 904-394-7446
- v. Email Address: [sales@zabatt.com](mailto:sales@zabatt.com)
- vi. Website: [www.zabatt.com](http://www.zabatt.com)
- vii. Type of organization: Corporation
- viii. Hours of operation: Office: M-F, 8-5pm  
Service Department: available 24hrs/7days emergency service  
ph: 800-366-1323

- ix. Years in Business: 38yrs
- x. Address of Corporate Headquarters: 4612 Highway Ave, Jacksonville, FL 32254
- xi. Address of local office: 911 NW 209<sup>th</sup> Ave, Pembroke Pines, FL 33029
- xii. List of contact personnel:

Jose Sabatier  
owner / CEO  
904-421-9827

Michael Sabatier  
President  
904-421-9822

Chad Rowland  
Operations Manager  
904-647-2469

Carlos Hernandez  
Sales Rep  
786-390-7855

- xiii. Additional Info: Zabatt has been in business for 38yrs providing Sales, Parts, and Service of Generators and Air Compressors throughout the state of Florida. Some of the Product lines include: Generac, AKSA, and Gardner Denver. We have a department specializing in turn-key installations of generators and air compressors.



**ZABATT**  
POWER SYSTEMS

Jacksonville – Orlando - Tampa

Zabatt Inc.  
Corporate Office  
4612 Highway Ave Jacksonville, FL 32254  
Ph: 904-384-4505  
Fax: 904-394-7446

Date: 08/29/16  
Quote Number: 37218  
Quote Expires: 90 days from issue date

**GENERAC\***

**Project: City of Delray Beach – Fire Station No. 5 – ITBC NO. 2016-133**

**We are pleased to offer the following proposal for your project:**

**Quantity 1 - Generac Industrial gaseous engine-driven generator, 9.0L V-8 engine, consisting of the following features and accessories:**

- **Dual Fuel System**
  - **Natural Gas – Primary**
  - **LP Vapor - Secondary**
- **100 kW** Rating, wired for **120/208 VAC three phase**, 60 Hz
- Stationary Emergency-Standby rated
- Permanent Magnet Excitation
- Alternator Strip Heater
- UL2200
- EPA Certified
- SCAQMD
- H-100 Control Panel
  - Meets NFPA 99 and 110 requirements
  - Temp Range -40 to 70 degrees C
  - Digital Microprocessor:
    - Two 4-line x 20 displays, full system status
    - 3 Phase sensing, +/-0.25% digital voltage regulation
    - RS232, RS485 and Canbus remote ports
    - Waterproof connections
    - All engine sensors are 4-20ma for minimal interference
    - Programmable I/O
    - Built-in PLC for special applications
  - Engine function monitoring and control:
    - Full range standby operation; programmable auto crank, Emergency Stop, Auto-Off-Manual switch
    - Isochronous Governor, +/-0.25% frequency regulation
    - Full system status on all AC output and engine function parameters
    - Service reminders, trending, fault history (alarm log)
    - I2T function for full generator protection
    - Selectable low-speed exercise
  - HTS transfer switch function monitoring and control
  - 2-wire start controls for any 2-wire transfer switch
- **Level 1 Acoustic Enclosure – Steel (avg 75dBA @ full load – 23ft)**
  - Industrial Grey Baked-On Powder Coat Finish
- **Standard MLCB, 80% rated thermal-magnetic**
  - **400 Amp**
  - Shunt trip and Auxiliary Contacts
  - w/ std factory lugs
- Battery Charger, 10 Amp, NFPA 110 compliant, installed





**ZABATT**  
POWER SYSTEMS

Jacksonville – Orlando - Tampa

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Corporate Office  
4612 Highway Ave Jacksonville, FL 32254  
Ph: 904-384-4505  
Fax: 904-394-7446

Date: 08/29/16  
Quote Number: 37218  
Quote Expires: 90 days from issue date

**GENERAC**

**Project: City of Delray Beach – Fire Station No. 5 – ITBC NO. 2016-133**

- 
- 110 AH, 925 CCA Group 31 Battery, with rack, installed
  - Coolant Heater, 1500W, 120VAC
  - Remote Emergency Stop Switch, break-glass, shipped loose
  - Flex Fuel Line
  - 21 Light Annunciator w /flush mount kit
  - Std set of 3 Manuals

**Quantity 1 - Automatic Transfer Switch:**

- ASCO 300 Series
- Rated at **400 Amp**
- **208 Volt, 3 Phase, 3 Pole**
- **Service Entrance Rated**
- Shunt trip
- Auxiliary contacts (14AA / 14BA)
- Load disconnect contacts (31Z)
- Exerciser (11BE)
- **NEMA 3R Enclosure**

**\*Specific circuit breaker only ATS provided**

**\*Upstream breakers must NOT be LSI**

**Installation – Scope of Work (License # EC13006469)**

- Scope of Work to include replacement of the existing Emergency Generator with a new 100kW, 120/208V, 3ph Natural Gas/LP Vapor Generator
- Installation of a new 400A, 208V, 3ph, 3pole, Service Entrance Rated, NEMA 3R Automatic Transfer Switch
- Excludes: LP Tank, Natural Gas meter, regulator, plumbing, and connections

**\*Any alterations or deviations from the above specifications involving extra costs will be executed only upon written order, and will become an extra charge over and above the estimate; including and not limited to authority having jurisdictions changes and unforeseen violations.**



**ZABATT**  
POWER SYSTEMS

Jacksonville – Orlando - Tampa

Zabatt Inc.  
Corporate Office  
4612 Highway Ave Jacksonville, FL 32254  
Ph: 904-384-4505  
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Date: 08/29/16  
Quote Number: 37218  
Quote Expires: 90 days from issue date

**GENERAC**

**Project: City of Delray Beach – Fire Station No. 5 – ITBC N0. 2016-133**

**Miscellaneous:**

On-Site Start Up and Testing

Warranty:

Generator: 5-Year Comprehensive Warranty (from date of performing start up)

ATS: 5-Year Limited Warranty (from date of shipment from factory)

Gaseous units are NOT field convertible per EPA requirements

FOB Origin, full freight allowed to first destination

**The Following Is Not Included:**

Fuel / Plumbing / Meter / Regulator

Load Bank Testing

Service & Maintenance Agreement

**10 - 12 Week Estimated Ship Date**

**PRICE: \$ 104,469 + 10,000.00 (Owner's contingency Allowance) +  
\$10.00 (Indemnification) = \$114,479.00 plus applicable sales tax**

- Customers are responsible for paying sales and use tax on goods shipped outside of the State of Florida.
- Zabatt, Inc. is a State of Florida Certified Minority owned business.
- Built in discount of 2.5% has been applied to quote for payments that consist of cash, check, EFT or wire transfer.



**ZABATT**  
POWER SYSTEMS

Jacksonville – Orlando - Tampa

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4612 Highway Ave Jacksonville, FL 32254  
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Date: 08/29/16  
Quote Number: 37218  
Quote Expires: 90 days from issue date

**GENERAC**

**Project: City of Delray Beach – Fire Station No. 5 – ITBC NO. 2016-133**

#### Changes, Cancellations, and Returns

Any order or contract may be cancelled by the customer only upon the payment of reasonable charges and expenses incurred by Zabatt on or before the date of receipt by Zabatt of said notice of cancellation. Such reasonable charges and expenses may include, but are not limited to, any cancellation charges incurred by Zabatt for the cancellation and/or any liabilities for orders or commitments for materials or services previously ordered by Zabatt in connection with the cancelled customer order or contract. No material or product may be cancelled or returned for credit without first obtaining the written approval of, and at the sole discretion of, Zabatt. All shipping costs on returned material must be pre-paid by the customer. Accepted returns are subject to the charges, terms and requirements notified in writing to the buyer (which may include, with no limitations or exceptions, a 15% restocking fee).

#### Delivery, Shipments, and Claims (to include Warranty)

All charges for work performed during the warranty period are the responsibility of the customer until approved by the appropriate warranty authority. Warranties are subject to the manufacturer's guidelines. Even those warranty claims which are approved may not include 100% of the repairs or parts; the customer is responsible for charges excluded from warranty. Contingency payment arrangements must be made prior to any warranty work being performed. Batteries, oil, coolant, filters and adjustments are not covered as part of warranty repairs and will be billed to the customer at appropriate rates.

#### Price and Minimum Billing

Price shall be in accordance with rates currently in effect at the time the quote is received and shall expire on the date described in said quote. All quotes for services, parts, equipment, and labor will be issued in writing and have a system generated quote number. Verbal quotes are not valid and should not be accepted. A signed copy of the quote must on file before any work can be performed. Signature on said quote shall serve as the customer's acceptance Zabatt's billing guidelines and rates. Labor prices on quotes are good for a period of (60) sixty days from the date of issue unless otherwise specified. Parts and equipment prices are subject to change and billed at the current price at the time of purchase unless otherwise specified. All regular service calls and emergency calls within normal hours will be billed for a minimum of one hour of labor and ten miles of travel. All emergency after-hour calls will be billed for a minimum of four hours labor and ten miles of travel.

#### Credit and Payment Terms

Commercial customers who have not established a credit account with Zabatt must make payment arrangements before goods are delivered or a technician is dispatched. No credit terms will be extended to end-users. We cannot accept payment on site but must have a signed credit card authorization on file in order to perform any service work on new accounts. No work will be performed for, or product delivered to, customers who are on credit hold. This hold includes any emergency repairs and warranty work that may be required. Account must be paid in full or alternate means of payment must be coordinated and approved before work is performed or product is delivered. Service Rate Definitions and Conditions are available as a separate document

#### Agreement

This agreement consists of, and is limited to, a qualified technician performing scheduled maintenance in accordance with the manufacturer's recommendations. Zabatt, Inc will not be held liable for damages to the equipment or property as a result of equipment failure caused by any of, but not limited to, the following circumstances: improper or unauthorized operation; normal wear and tear or damage due to overloading; vandalism, theft or acts of a third party; acts of nature; failure to perform services due to hazardous conditions and other causes beyond the control of Zabatt Inc.

Signature and acceptance of the quotation constitutes agreement to comply with Zabatt's terms and conditions as attached.

\_\_\_\_\_  
Signature of Owner or Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Zabatt Representative

\_\_\_\_\_  
Date

Carlos Hernandez  
(786) 390-7855  
[Carlos.Hernandez@zabatt.com](mailto:Carlos.Hernandez@zabatt.com)

**SG100 | 9.0L | 100 kW**  
**INDUSTRIAL SPARK-IGNITED GENERATOR SET**  
 EPA Certified Stationary Emergency

**GENERAC** | **INDUSTRIAL POWER**

**STANDBY POWER RATING**

100 kW, 125 kVA, 60 Hz

**PRIME POWER RATING\***

90 kW, 113 kVA, 60 Hz



\*Built in the USA using domestic and foreign parts

\*EPA Certified Prime ratings are not available in the U.S. or its Territories.

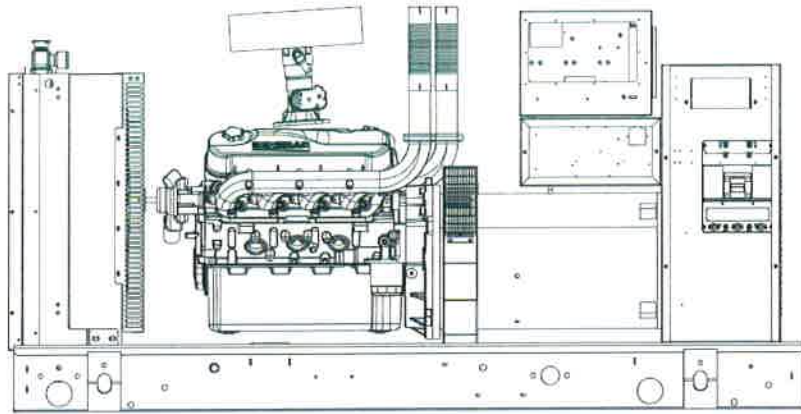


Image used for illustration purposes only

**CODES AND STANDARDS**

Generac products are designed to the following standards:



UL2200, UL508, UL142, UL498



NFPA70, 99, 110, 37



NEC700, 701, 702, 708



ISO9001, 8528, 3046, 7637,  
Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



IBC 2009, CBC 2010, IBC 2012, ASCE 7-05,  
ASCE 7-10, ICC-ES AC-156 (2012)

**POWERING AHEAD**

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

# SG100 | 9.0L | 100 kW

## INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency

**GENERAC** | **INDUSTRIAL POWER**

### STANDARD FEATURES

#### ENGINE SYSTEM

##### General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Factory Filled Oil & Coolant
- Radiator Duct Adapter (open set only)
- Critical Exhaust Silencer (enclosed only)

##### Fuel System

- Flexible fuel line - NPT Connection
- Primary and secondary fuel shutoff

##### Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- 50/50 Ethylene glycol antifreeze
- Radiator drain extension

##### Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Rubber-booted engine electrical connections
- Solenoid activated starter motor

#### ALTERNATOR SYSTEM

- UL2200 Genprotect™
- Class H insulation material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearings
- Amortisseur winding
- Full load capacity alternator

#### GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

#### ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material (L1 & L2)
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

#### CONTROL SYSTEM



##### Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection

- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

##### Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

# SG100 | 9.0L | 100 kW

## INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency

**GENERAC** | **INDUSTRIAL POWER**

### CONFIGURABLE OPTIONS

#### ENGINE SYSTEM

##### General

- ☐ Engine Block Heater
- ☐ Oil Heater
- ☐ Air Filter Restriction
- ☐ Stone Guard (Open Set Only)

##### Engine Electrical System

- ☐ 10A & 2.5A UL battery charger
- ☐ Battery Warmer

#### ALTERNATOR SYSTEM

- ☐ Alternator Upsizing
- ☐ Anti-Condensation Heater
- ☐ Tropical Coating
- ☐ Permanent Magnet Excitation

#### CIRCUIT BREAKER OPTIONS

- ☐ Main Line Circuit Breaker
- ☐ 2nd Main Line Circuit Breaker
- ☐ Shunt Trip and Auxiliary Contact
- ☐ Electronic Trip Breaker

#### GENERATOR SET

- ☐ Gen-Link Communications Software (English Only)
- ☐ Extended Factory Testing (3 Phase Only)
- ☐ IBC Seismic Certification
- ☐ 8 Position Load Center
- ☐ 2 Year Extended Warranty
- ☐ 5 Year Warranty
- ☐ 5 Year Extended Warranty

#### ENCLOSURE

- ☐ Standard Enclosure
- ☐ Level 1 Sound Attenuation
- ☐ Level 2 Sound Attenuation
- ☐ Steel Enclosure
- ☐ Aluminum Enclosure
- ☐ 150 MPH Wind Kit
- ☐ 12 VDC Enclosure Lighting Kit
- ☐ 120 VAC Enclosure Lighting Kit
- ☐ AC/DC Enclosure Lighting Kit
- ☐ Door Alarm Switch

#### CONTROL SYSTEM

- ☐ NFPA 110 Compliant
- ☐ Remote Relay Board (8 or 16)
- ☐ Oil Temperature Sender with Indication Alarm
- ☐ Remote E-Stop (Break Glass-Type, Surface Mount)
- ☐ Remote E-Stop (Red Mushroom-Type, Surface Mount)
- ☐ Remote E-Stop (Red Mushroom-Type, Flush Mount)
- ☐ Remote Communication - Bridge
- ☐ Remote Communication - Ethernet
- ☐ 10A Run Relay
- ☐ Ground Fault Indication and Protection Functions

### ENGINEERED OPTIONS

#### ENGINE SYSTEM

- ☐ Coolant heater ball valves
- ☐ Fluid containment pans

#### ALTERNATOR SYSTEM

- ☐ 3rd Breaker Systems

#### CONTROL SYSTEM

- ☐ Spare inputs (x4) / outputs (x4) - H Panel Only
- ☐ Battery Disconnect Switch

#### GENERATOR SET

- ☐ Special Testing
- ☐ Battery Box

#### ENCLOSURE

- ☐ Motorized Dampers
- ☐ Intrusion Alert Door Switch
- ☐ Ambient Heaters

### RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

**SG100 | 9.0L | 100 kW**  
**INDUSTRIAL SPARK-IGNITED GENERATOR SET**  
 EPA Certified Stationary Emergency

**GENERAC** | **INDUSTRIAL POWER**

**APPLICATION AND ENGINEERING DATA**

**ENGINE SPECIFICATIONS**

**General**

Make	Generac
Cylinder #	8
Type	V
Displacement - L (cu In)	8.9L (540)
Bore - mm (in)	114.23 (4.49)
Stroke - mm (in)	107.15 (4.25)
Compression Ratio	10.5:1
Intake Air Method	Naturally Aspirated
Number of Main Bearings	5
Connecting Rods	Forged
Cylinder Head	Cast Iron
Cylinder Liners	No
Ignition	High Energy
Piston Type	Aluminum Alloy
Crankshaft Type	Forged Steel
Lifter Type	Hydraulic Roller
Intake Valve Material	Steel Alloy
Exhaust Valve Material	Stainless Steel
Hardened Valve Seats	Yes
<b>Engine Governing</b>	
Governor	Electronic
Frequency Regulation (Steady State)	±0.25%
<b>Lubrication System</b>	
Oil Pump Type	Gear
Oil Filter Type	Full-flow sping-on cartridge
Crankcase Capacity - L (qts)	8.5 (8.0)

**Cooling System**

Cooling System Type	Pressurized Closed
Water Pump Flow -gal/min (l/min)	26 (98)
Fan Type	Pusher
Fan Speed (rpm)	2330
Fan Diameter mm (in)	558 (22)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 V

**Fuel System**

Fuel Type	Natural Gas, Propane Vapor
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Regulator	Standard
Operating Fuel Pressure (Standard)	11" - 14" H <sub>2</sub> O
Operating Fuel Pressure (Optional)	7" - 14" H <sub>2</sub> O

**Engine Electrical System**

System Voltage	12 VDC
Battery Charging Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

**ALTERNATOR SPECIFICATIONS**

Standard Model	390mm	Standard Excitation	Brushless
Poles	4	Bearings	Sealed Ball
Field Type	Revolving	Coupling	Direct Drive
Insulation Class - Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class - Stator	H	Voltage Regulator Type	Full Digital
Total Harmonic Distortion	<5%	Number of Sensed Phases	All
Telephone Interference Factor (TIF)	<50	Regulation Accuracy (Steady State)	±0.25%



# SG100 | 9.0L | 100 kW

## INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency

**GENERAC** | **INDUSTRIAL POWER**

### OPERATING DATA

#### POWER RATINGS

		Natural Gas	Propane Vapor
Single-Phase 120/240 VAC @1.0pf	100 kW	Amps: 417	Amps: 417
Three-Phase 120/208 VAC @0.8pf	100 kW	Amps: 347	Amps: 347
Three-Phase 120/240 VAC @0.8pf	100 kW	Amps: 301	Amps: 301
Three-Phase 277/480 VAC @0.8pf	100 kW	Amps: 150	Amps: 150
Three-Phase 347/600 VAC @0.8pf	100 kW	Amps: 120	Amps: 120

#### STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip											
		480 VAC						208/240 VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	100	79	118	157	197	236	275	59	89	118	148	177	206
Upsize 1	130	116	174	232	290	348	406	87	131	174	218	261	305

#### FUEL CONSUMPTION RATES\*

Natural Gas - ft <sup>3</sup> /hr (m <sup>3</sup> /hr)			Propane Vapor - ft <sup>3</sup> /hr (m <sup>3</sup> /hr)		
Percent Load	Standby		Percent Load	Standby	
25%	391 (11.1)		25%	157.4 (4.5)	
50%	669 (19.0)		50%	269.9 (7.6)	
75%	904 (25.6)		75%	364.4 (10.3)	
100%	1116 (31.6)		100%	449.8 (12.7)	

\* Fuel supply installation must accommodate fuel consumption rates at 100% load.

#### COOLING

		Standby
Air Flow (inlet air combustion and radiator)	ft <sup>3</sup> /min (m <sup>3</sup> /min)	5797 (164.2)
Coolant Flow per Minute	gal/min (l/min)	26 (98)
Coolant System Capacity	gal (l)	6.0 (22.7)
Heat Rejection to Coolant	BTU/hr	390,000
Max. Operating Ambient Temperature (before derate)	°F (°C)	122 (50)
Maximum Radiator Backpressure	in H <sub>2</sub> O	0.5

#### COMBUSTION AIR REQUIREMENT

	Standby
Flow at Rated Power cfm (m <sup>3</sup> /min)	282 (7.9)

#### ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	149
Piston Speed	ft/min	1275
BMEP	psi	125

#### EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m <sup>3</sup> /min)	866 (24.5)
Max. Backpressure (Post Turbo)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output - post silencer)	°F (°C)	1230 (666)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

\*\* Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

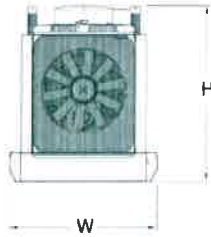
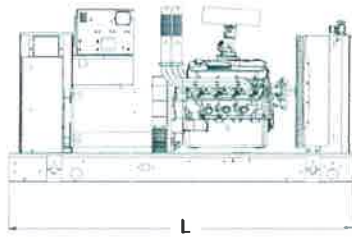
Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.



**SG100 | 9.0L | 100 kW**  
**INDUSTRIAL SPARK-IGNITED GENERATOR SET**  
 EPA Certified Stationary Emergency

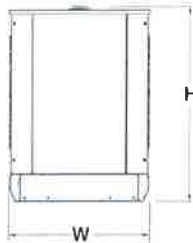
**GENERAC** | **INDUSTRIAL POWER**

**DIMENSIONS AND WEIGHTS\***



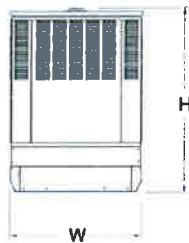
**OPEN SET (Includes Exhaust Flex)**

L x W x H in (mm)	94.2 (2394) x 40 (1016) x 47.5 (1206)
Weight lbs (kg)	2543 (1153)



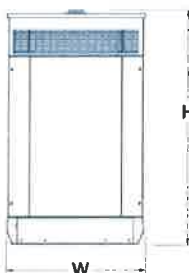
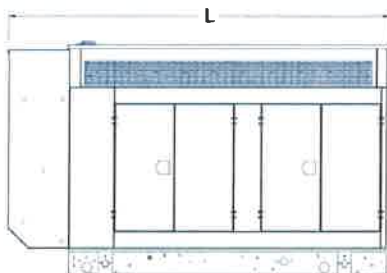
**STANDARD ENCLOSURE**

L x W x H in (mm)	111.79 (2839.5) x 40.46 (1027.8) x 56.18 (1427)
Weight lbs (kg)	Steel: 3072 (1393) Aluminum: 2802 (1271)



**LEVEL 1 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	129.42 (3287.2) x 40.46 (1027.8) x 56.18 (1427)
Weight lbs (kg)	Steel: 3233 (1466) Aluminum: 2873 (1303)



**LEVEL 2 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	111.81 (2840) x 40.46 (1027.8) x 68.61 (1742.8)
Weight lbs (kg)	Steel: 3360 (1524) Aluminum: 2928 (1328)

\*All measurements are approximate and for estimation purposes only.

**YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER**

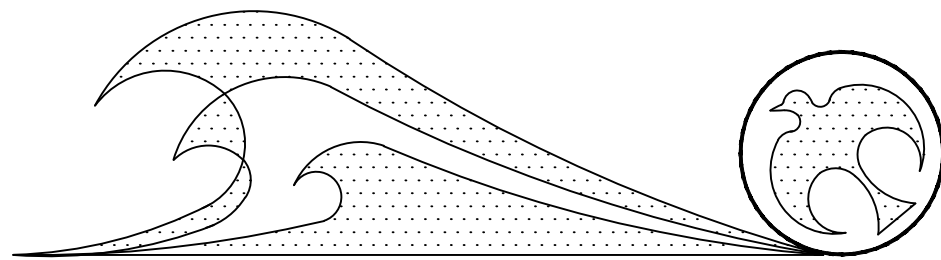
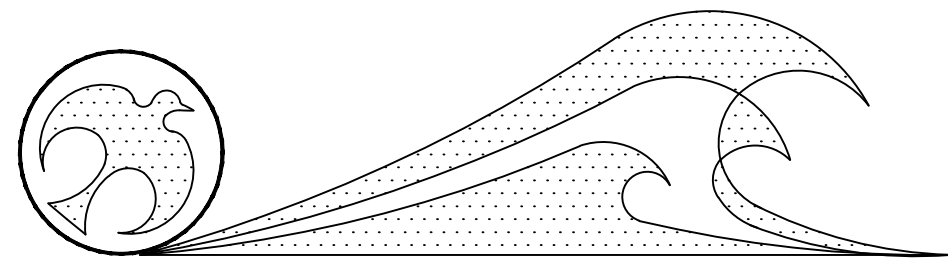
Specification characteristics may change without notice. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.



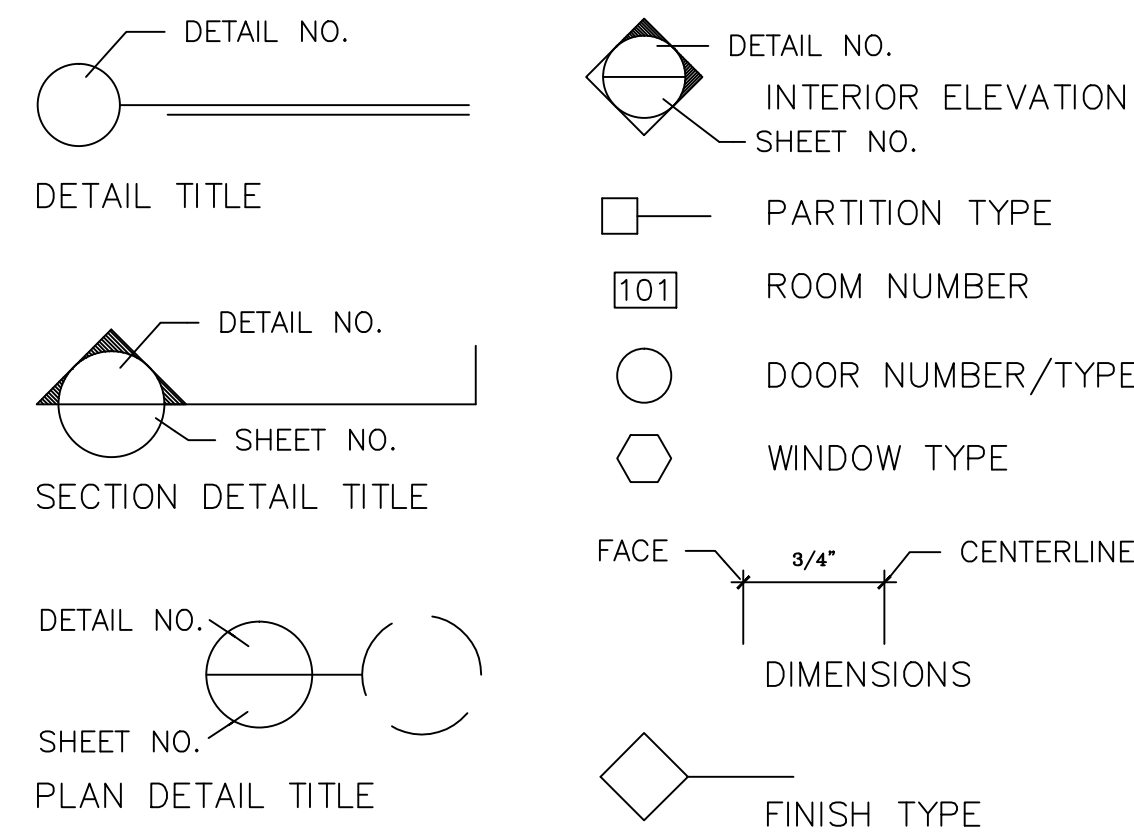
# Fire Station No. 5 - Emergency Generator & Enclosure

City of Delray Beach Project Number 14-011

4000 Germantown Road, Delray Beach, Florida



## SYMBOL LEGEND



## DEMOLITION NOTES

- Demolition consists of performing all demolition as shown on these drawings, and of any existing construction which in its present position will interfere with new construction. The Contractor will provide and perform any cutting or patching of existing construction as shown on the drawings, or as reasonably inferred.
- All surfaces, not scheduled for demolition, which are disturbed by demolition, cutting, patching or in any other way by the Contractor shall be restored to match existing adjacent surfaces. All patches shall be imperceptible.
- Existing walls which are to remain are to be protected in a manner determined by the Contractor to adequately protect the surface finishes.
- The Contractor shall locate existing walls which are indicated to remain and verify that the in place location is the same as the location for any new construction. Any discrepancies between as-built and new work shall be called to the attention of the Architect in writing before proceeding with work. The Contractor shall be responsible for coordinating with the Architect to determine proper course of action.
- All Electrical demolition is to be performed by State of Florida licensed Electrical Subcontractors utilizing trained personnel. All electrical devices which are removed must be properly safed off. No exposed wiring or hazards will be permitted to remain. Cap or remove wiring to junction boxes or panels. Provide As-Built information on any electrical devices or circuitry affected as a part of this demolition work.

## GENERAL NOTES

- All Work shall be performed in strict accordance with the Florida Building Code, 2014, fifth edition, and all amendments as well as the 2010 Edition of the Florida Fire Prevention Code and the 2009 Edition of NFPA 1 and NFPA 101 with Florida Amendments. All work shall conform to the requirements of NFPA 241. Reference to other standard specifications or codes shall mean the latest standard or code adopted and published.
- All required tests shall be performed by an approved testing laboratory at the Owner's expense. Test results shall be submitted to the Architect and/or Engineer. Tests resulting in failure shall be redone (successfully) at no additional cost to the owner.
- It shall be the responsibility of the Contractor to familiarize himself with all conditions of the site relative to existing work and the construction documents prior to commencing Work. Job site measurements are the full responsibility of the Contractor and/or Subcontractors.
- The Contractor shall verify all dimensions in the field. Discrepancies shall be reported to the Architect prior to the commencement of the Work.
- The Contractor shall coordinate the work of all trades at the time the work is performed on this structure. No additional payments shall be made for the Contractor's failure to correct conflicting field conditions. Correction of defects shall be completed without additional charge and shall include replacement or repair of any other phase of installation that may have been damaged during repair of such work.
- It is not the intent of these plans to show every minor detail of construction, the Contractor is expected to furnish and install all items necessary to complete final work.
- Do not scale drawings to obtain dimensions. Any dimensions not indicated on drawings are to be confirmed with Architect prior to commencement of Work.
- See architectural plans, elevations, details, and schedules for additional notes and information, refer to specifications for specific material requirements.
- In the event of any need for special sequencing of work is required, the Contractor shall arrange for special sequencing of work.
- Contractor shall provide a construction schedule to the Owner indicating proposed timing prior to commencing Work.
- All finishes are to meet Type A flame spread ratings.
- All concealed wood is to be fire retardant treated wood product(s).
- All asbestos containing materials, if encountered, are to be properly removed and/or encapsulated per all codes and under the direction of a Florida Licensed Engineer licensed for such purpose.
- The Architect has no responsibility for the design of Life Safety Systems & components including building risers and sprinkler systems, alarm systems, etc. nor hazardous materials, if encountered. Such items are responsibility of a Florida Licensed Engineer licensed for such purpose.

## PROJECT DESCRIPTION

THIS PROJECT INCLUDES THE ASSOCIATED SITE DEMOLITION AND NEW CONSTRUCTION OF A CMU EMERGENCY GENERATOR ENCLOSURE AND THE INSTALLATION OF A NEW GENERATOR AND ASSOCIATED ELECTRICAL WORK. THE SCOPE OF WORK INCLUDES LIMITED DEMOLITION, NEW MASONRY AND CONCRETE CONSTRUCTION, STUCCO, PAINT, LIMITED PAVING, LIMITED LANDSCAPING AND IRRIGATION, & ASSOCIATED ELECTRICAL WORK.

## ABBREVIATIONS

ABV. Above	F.C.U. Fan Coil Unit	P.L. Property Line
AC. Air Conditioning	F.D. Fire Damper	PLAS. Plaster
ACOUST. Acoustical	F.DRN. Floor Drain	PLYWD. Plywood
A.C.T. Acoustical Ceiling Tile	F.H.C. Fire House Cabinet	PNT. Paint
ADMIN. Administrative	FIN. Finish	POL. Polished
ADRN. Area Drain	FIN.FLR. / F.F.Finish Floor	POL. Polished
A.F.F. Above Finished Floor	FIXT. Fixture	P.T.D. Paper Towel Dispenser
A.H.U. Air Handling Unit	F.L.R. Floor	P.V.C. Polyvinyl Chloride
ALUM. ALuminum	GALV. Galvanized	P.T.D. Painted
ANOD. Anodized	GL. Glass	R. Riser
APPROX. Approximately	GRD. Ground	R.A. Return Air
ASB. Asbestos	GYP.BD./G.B.Gypsum Board	RAD. or R.Radius
ASPH. Asphalt	H. High	R.C. Reinforced Concrete
ASST. Assistant	HDWR. Hardware	R.D. Roof Drain
BATT. Battery	H.M. Hollow Metal	REFL. Reflected
BD. Board	HORIZ. Horizontal	REFRIG. Refrigerator
BLDG. Building	H.PT. High Point	RET. Retaining
BLK. BLKs-Block, Blocking	HGT. Hollow Clay Tile	RM. Room
BM. Beam	HT. Height	R.O. Rough Opening
BOT. Bottom	H.V. High Voltage	R.W.D.P. Rain Water Drain Pipe
BR. Brick	H.W.H. Hot Water Heater	SCHED. Schedule
BRK. Breaker	I.D. Interior Design	S. DWGS. Structural Drawings
BRNZ. Bronze	I.DIA./I.D. Inside Diameter	SERV. Service
BTW. Between	INSUL. Insulation	SH. Shower
CEM. Cement	INT. Interior	SH. Sheet
C.C. Center to Center	JT. Joint	SIM. Similar
CEM. Cement	JAN. / J. Janitor	SLID. Sliding
CERT. or C.T.Ceramic Tile	KIT. Kitchen	S.N.D. Sanitary Napkin Disposal
C.G. Corner Guard	LAV. Lavatory(Washbasin)	S.N. DISP Sanitary Napkin Dispenser
C.H. Ceiling Height	L.C. Laundry or Linen Chute	SOAP DISP Soap Dispenser
C.I. Cast Iron	L.P. Low Point	SP. Special
C.J. Control Joint	LT. Light	SPECS. Specifications
CL. Center Line	L.V. Low Voltage	SPK. Sprinkler
CLG. Ceiling	M. Meter(s)	SQ. Square
CLR. Clear	MACH. Machine	S.S. Service Sink
CMU Concrete Masonry Unit	MAS. Masonry	S.S.TL./ST.ST. Stainless Steel
COL. Column	MAX. Maximum	STL. Steel
COMP. Compressor	M.C. Medicine Cabinet	STOR. Storage
CONC. Concrete	M.D.F. Main Distribution Frame	SUSP. Suspended
CONT. Continuous	MECH. Mechanical	TRD. Tread
CPT. Carpet	MEMB. Membrane	T.O.C. Top of Curb
DET. Detail	MFR. Manufacturer	TELE. Telephone
D.F. or D.Diameter	MGR. Manager	TEMP. Tempered
DIR. Director	MIN. Minimum	TH. Threshold
D.N. Down	MISC. Miscellaneous	THK. Thick
D.O. Door Opening	MM. Millimeter(s)	T.O.S. Top of Slab
D.O.H. Door Opening Height	M.O. Masonry Opening	T.P.H. Toilet Paper Holder
D.O.W. Door Opening Width	M.T. Metal Threshold	TRANS. Transom
DR. Door	MTD. Mounted	TRAN. Transom
DWGS. Drawings	MTL. Metal	TRZ. Terrazzo
EA. Each	MULL. Mullion	T.O.W. Top of Wall
E.J. Expansion Joint	N.I.C. Not In Contract	TYP. Typical
ELEV. Elevation	NO. Number	UR. Urinal
ELEC. Electrical	NOM. Nominal Dimension	V.C.T. Vinyl Composition Tile
E.O.S. Edge of Slab	N.T.S. Not to Scale	VERT. Vertical
EQ. Equal	O.C. On Center	VEST. Vestibule
EQUIP. Equipment	O.D. Outside Diameter	V.T.R. Vent Thru Roof
ESCAL. Escalator	OFI. Owner Furnished	W. With
EX. Exposed	OFF. Office	W.C. Water Closet
EXH. Exhaust	OPNG. Opening	WD. Wood
EXIST. Existing	OPP.HD. Opposite Hand	W.O. Where Occurs
EXP. Exposed	PASS. Passenger	WP. Waterproof
EXT. Exterior	P.C. Precast Concrete	W.R.M. Wet Riser Main
F&B Food & Beverage	P.DWGS. Plumbing Drawings	
	PL. Plate	

## DRAWING LIST

### ARCHITECT

- CS-1 COVER SHEET
- PR-1 PROJECT REQUIREMENTS
- A-1 SITE PLAN, DEMOLITION PLAN, & NOTES
- A-2 GENERATOR PLAN & DETAILS, STRUCTURAL REQUIREMENTS

### LANDSCAPE ARCHITECT

- DT-1 TREE REMOVAL PLAN
- LP-1 LANDSCAPE & IRRIGATION PLAN

### BY OTHERS - ELECTRICAL ENGINEERING

- E-0.1 ELECTRICAL NOTES, LEGEND & DETAILS
- E-1.1 SITE PLAN - ELECTRICAL

## PROJECT TEAM

### OWNER

CITY OF DELRAY BEACH  
100 NW 1st AVENUE  
DELRAY BEACH, FLORIDA

### ARCHITECT

DAVID MILLER & ASSOCIATES, P.A.  
319 CLEMATIS STREET SUITE 802  
WEST PALM BEACH, FLORIDA 33401

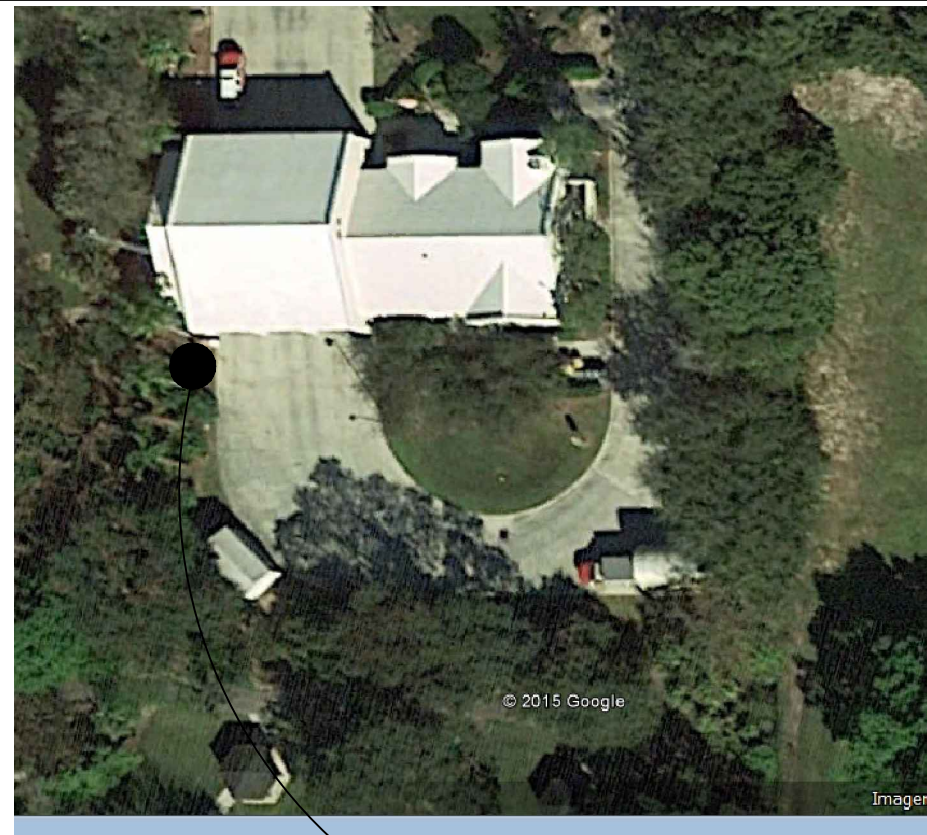
### LANDSCAPE ARCHITECT

STUDIO SPROUT, INC.  
521 25TH STREET  
WEST PALM BEACH, FLORIDA 33407

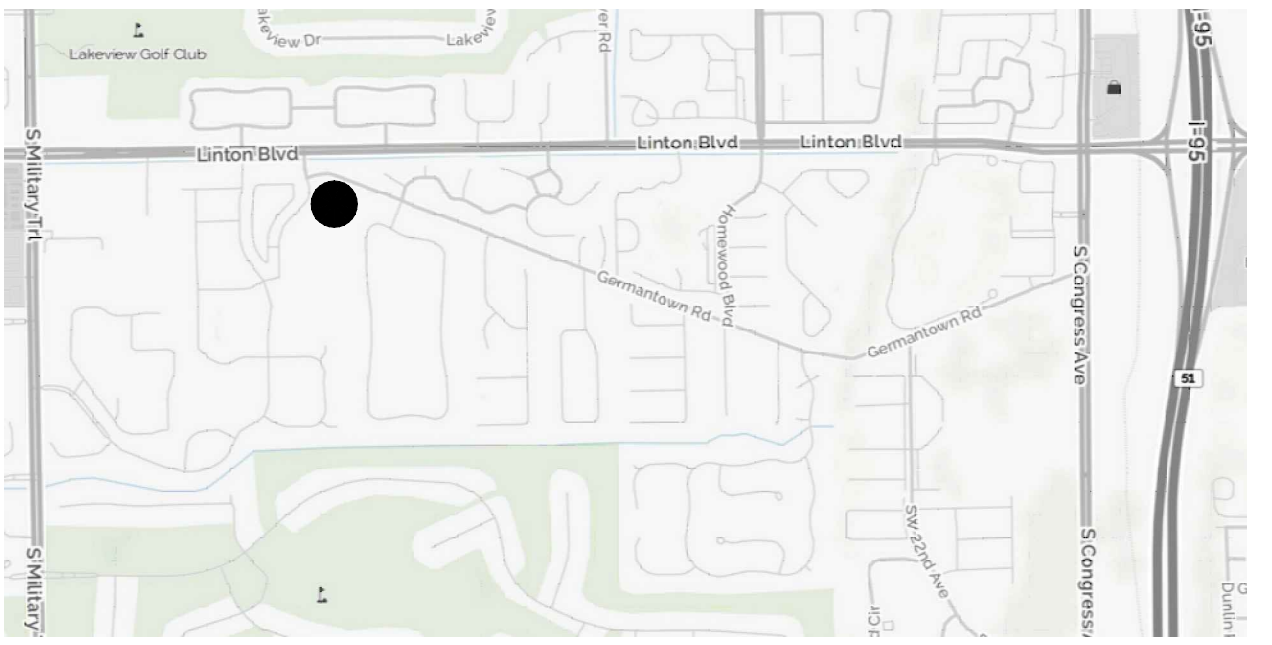
### STRUCTURAL ENGINEER

THOMAS J. TWOMEY  
2831 EXCHANGE COURT, SUITE A  
WEST PALM BEACH, FLORIDA 33409

## AERIAL VIEW



## LOCATION MAP



REVISIONS		
NO.	TITLE	DATE

ISSUANCES	
DATE	TITLE
	BID
	PERMIT
	CONSTRUCTION

PROJECT	CITY OF DELRAY BEACH FIRE STATION No. 5 EMERGENCY GENERATOR 4000 Germantown Road Delray Beach, Florida	COVER SHEET
SHEET TITLE		

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLISHED HEREIN IS EXPRESSLY LIMITED TO SUCH USE. REPRODUCTION, PUBLICATION OR RE-USE BY ANY METHOD, IN WHOLE OR IN PART, WITHOUT EXPRESS WRITTEN CONSENT BY THE ARCHITECT IS STRICTLY PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ARCHITECT WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS.

DAVID MILLER & ASSOCIATES, P.A.  
NO. 2600063  
319 Clematis Street Suite 802  
West Palm Beach, FL 33401  
Ph. (561) 833-0164 Fax (561) 833-0165 DMA@DavidMillerArchitect.com

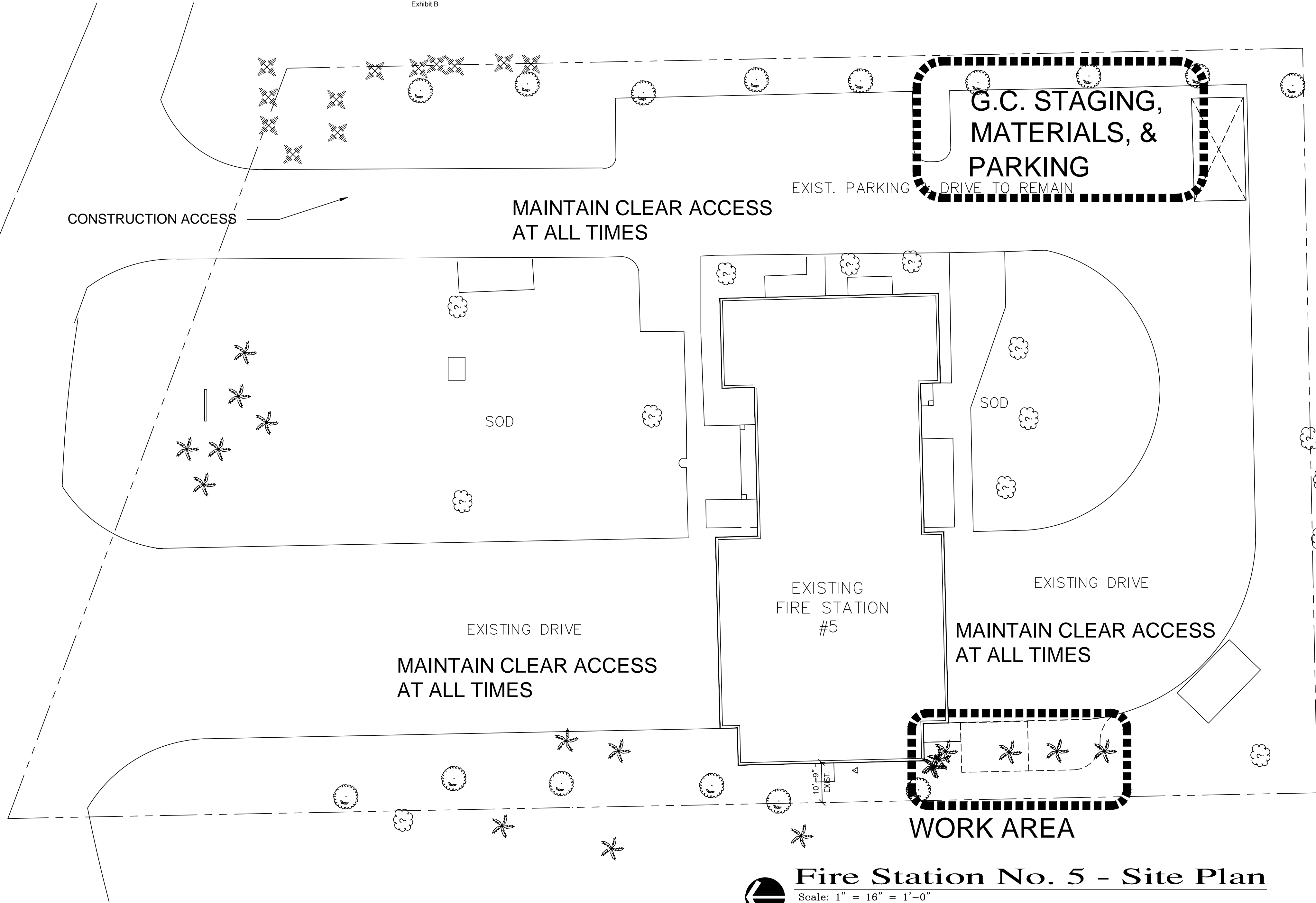
DAVID R. MILLER AR 9417  
STATE OF FLORIDA

DRAWN BY  
CHECKED BY  
DM&A No.

SCALE  
AS NOTED  
DATE  
5.18.2016

SHEET NUMBER  
CS-1  
1 OF 4





**Fire Station No. 5 - Site Plan**  
Scale: 1" = 16' = 1'-0"

**SPECIFIC PROJECT REQUIREMENTS**

1. Fire Station No. 5 is to remain open and be in continuous operation at all times.
2. All life safety components and paths of egress are to remain fully operational and accessible throughout the course of construction.
3. All construction activities are limited to those areas depicted in the project requirements.
4. The G.C. shall provide an overall project schedule indicating start and expected duration of the full project and bid alternates.
5. All work is expected to be performed simultaneously and continuously and will not interfere or disrupt ongoing Fire Station No. 5 operations and functions.
6. Prior to commencing work, the City will remove all equipment, personal effects, or related items.
7. The G.C. will install temporary construction barricades separating construction areas from adjacent areas. These barricades shall consist of 6' Chain Link Fencing to secure the construction areas.
8. After hours and weekend work is allowed if approved in advance by the City.

REVISIONS		
NO.	TITLE	DATE

ISSUANCES	
DATE	TITLE
	BID
	PERMIT
	CONSTRUCTION

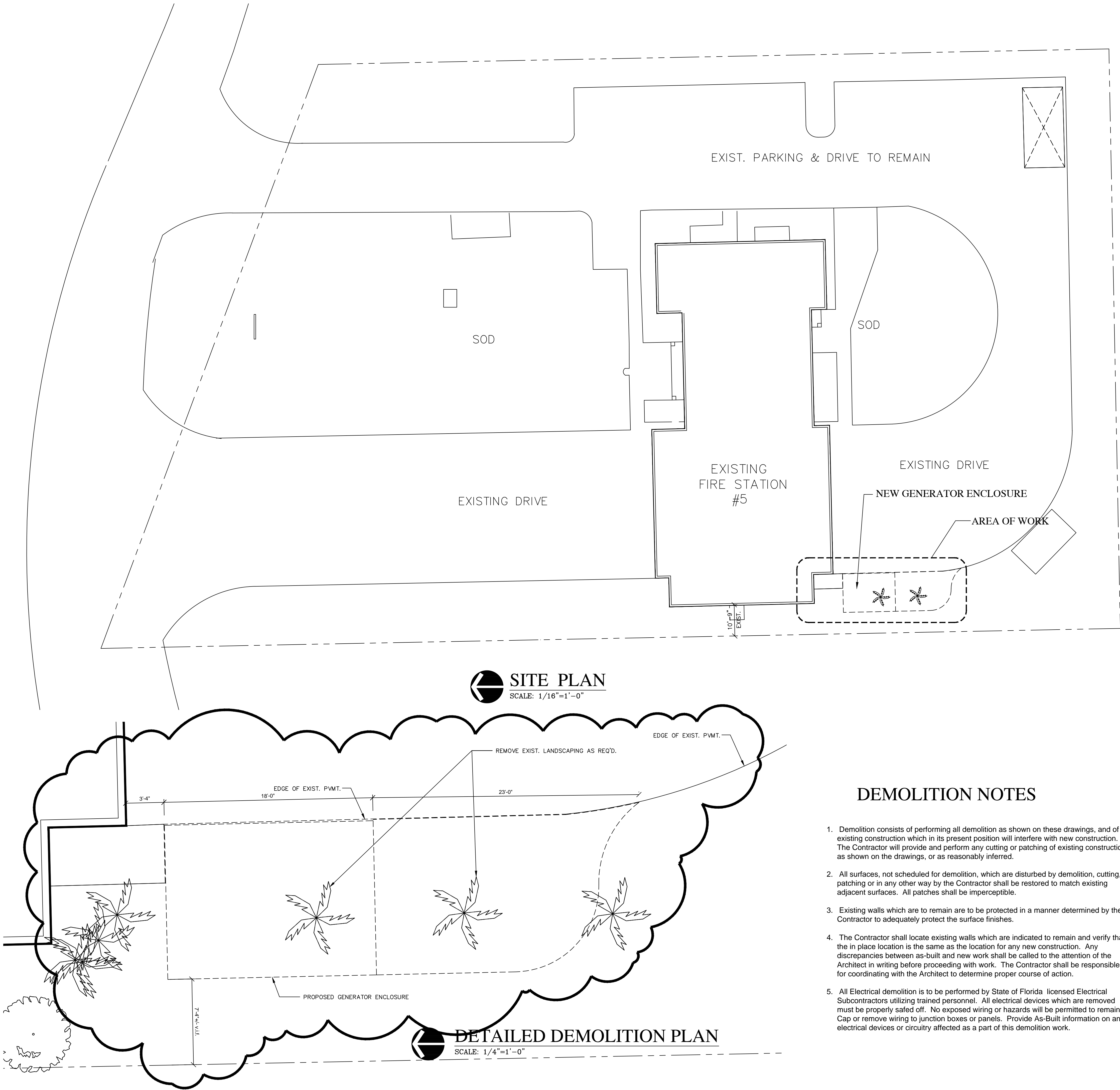
PROJECT	CITY OF DELRAY BEACH FIRE STATION No. 5 EMERGENCY GENERATOR 4000 Germantown Road Delray Beach, Florida
	PROJECT REQUIREMENTS
SHEET TITLE	

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West Palm Beach, FL 33401  
Ph. (561) 833-0164 Fax (561)833-0165 DMA@DavidMillerArchitect.com

DAVID R. MILLER AR 9417  
STATE OF FLORIDA

DRAWN BY	SCALE
CHECKED BY	AS NOTED
DM&A No.	DATE
	5.18.2016
SHEET NUMBER	
PR-1	
2 OF 4	



## DEMOLITION NOTES

- Demolition consists of performing all demolition as shown on these drawings, and of any existing construction which in its present position will interfere with new construction. The Contractor will provide and perform any cutting or patching of existing construction as shown on the drawings, or as reasonably inferred.
- All surfaces, not scheduled for demolition, which are disturbed by demolition, cutting, patching or in any other way by the Contractor shall be restored to match existing adjacent surfaces. All patches shall be imperceptible.
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- All Electrical demolition is to be performed by State of Florida licensed Electrical Subcontractors utilizing trained personnel. All electrical devices which are removed must be properly safed off. No exposed wiring or hazards will be permitted to remain. Cap or remove wiring to junction boxes or panels. Provide As-Built information on any electrical devices or circuitry affected as a part of this demolition work.

REVISIONS		
NO.	TITLE	DATE
1	BID CLARIFICATION	3.22.16

ISSUANCES	
DATE	TITLE
	BID
	PERMIT
	CONSTRUCTION

PROJECT	CITY OF DELRAY BEACH	SHEET TITLE
	FIRE STATION No. 5 EMERGENCY GENERATOR	
	4000 Germantown Road Delray Beach, Florida	
DEMOLITION PLAN & NOTES		

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. REPRODUCTION, PUBLICATION OR RE-USE BY ANY METHOD, IN WHOLE OR IN PART, WITHOUT EXPRESS WRITTEN CONSENT BY THE ARCHITECT IS STRICTLY PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ARCHITECT WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS.

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DAVID R. MILLER AR 9417  
STATE OF FLORIDA

DRAWN BY	SCALE
CHECKED BY	AS NOTED
DM&A No.	DATE
	5.18.2016
SHEET NUMBER	
A-1	
3 OF 4	

STRUCTURAL & GENERAL NOTES

1. SOIL STATEMENT:
- A. VISUAL INSPECTION OF SOIL INDICATES UNDISTURBED SAND AND LIMEROCK WITHIN ALLOWABLE BEARING CAPACITY OF 2.5 K.S.F. CONTRACTOR TO VERIFY BY PERFORMING FIELD SOIL BORING TESTS AS REQUIRED FROM AN APPROVED SOIL TESTING LABORATORY.
- B. PROVIDE PROPERLY COMPACTED NON-ORGANIC FILL TO 95% MODIFIED PROCTOR.
- C. OTHER AREA FOOTINGS SHALL BEAR ON SAID UNDISTURBED SAND AND ROCK.

2. CONCRETE:
- A. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS:  
ALL CONCRETE 3,000 P.S.I.
- B. TESTS: A MINIMUM OF 6 CONCRETE SPECIMENS SHALL BE TAKEN FROM EACH 50 CU. YDS. OR PORTION THEREOF. SPECIMENS SHALL BE TESTED ACCORDING TO ASTM C-39. ONE AT 3 DAYS, ONE AT 7 DAYS AND THREE AT 29 DAYS.
- C. COVER: CONCRETE DEPOSITED AGAINST THE GROUND 3". FORMED CONCRETE IN CONTACT WITH THE GROUND 2". BEAMS AND COLUMNS 1 1/2". SLABS AND WALLS 3/4"
- D. ALL CONSTRUCTION PER ACI CODE.

3. REINFORCING STEEL:
- A. REINFORCING BARS MUST CONFORM WITH ASTM A-615-90, GRADE 60.
- B. WELDED WIRE FABRIC MUST CONFORM WITH ASTM A-185 AND MUST BE SUPPORTED ON SLAB BOLSTERS SPACED AT 3'-0" MAXIMUM ON CENTER.
- C. FABRICATION AND DETAILING ACCORDING TO ACI 315.
- D. ALL ACCESSORIES MUST HAVE UPTURNED LEGS AND BE PLASTIC-DIPPED AFTER.

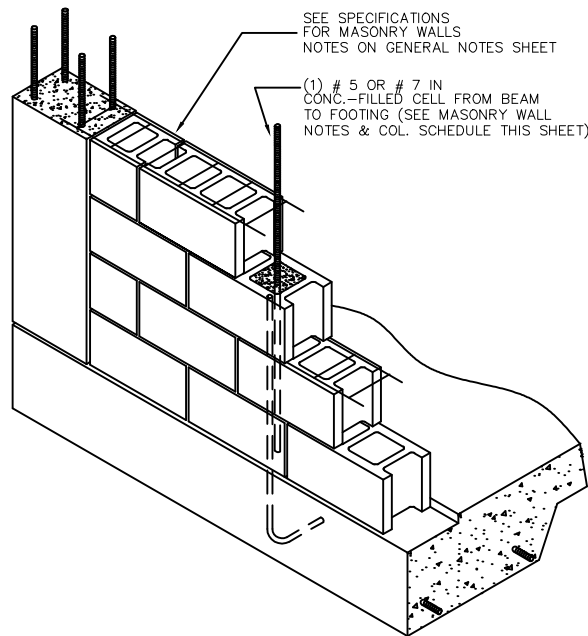
4. MASONRY WALLS:
- A. ALL MASONRY SHOWN TO BE BEARING ON PLAN: MUST BE ERECTED PRIOR TO THE STRUCTURE ABOVE BEING ERECTED.
- B. MORTAR: MUST CONFORM WITH ASTM C-270. TYPE M (2,500 P.S.I.).
- C. REINFORCING: USE DURAWALL TRUSS REINFORCING EVERY OTHER COURSE. USE VERTICAL REINFORCING BARS AS SPECIFIED ON THE PLANS.

5. WOOD:
- A. WOOD TRUSSES MUST BE DESIGNED IN ACCORDANCE WITH SOUTH FLORIDA BUILDING CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS BEARING THE SEAL OF A PROFESSIONAL STRUCTURAL ENGINEER WITH FLORIDA REGISTRATION. SPECIFY BOTH PERMANENT BRACING AND THAT WHICH IS REQUIRED DURING CONSTRUCTION
- B. OPTIONAL: ALL WOOD MEMBERS MUST HAVE A MINIMUM OF 1,200 F(B) P.S.I. EXCEPT FOR 4x12 HEADER BEAMS WHICH MUST HAVE A MINIMUM OF 1,550 P.S.I.

6. SLABS ON FILL:
- A. TO BE PLACED ON CLEAN NON-ORGANIC SOIL THOROUGHLY MOISTENED IMMEDIATELY BEFORE CONCRETE IS POURED. CONCRETE IS TO BE PLACED ON 0.006 IN VISQUEEN VAPOR BARRIER. SLABS ARE TO BE PLACED IN A "CHECKERBOARD" SEQUENCE. EACH SEGMENT OF WHICH IS NOT TO EXCEED A MAXIMUM AREA OF 1,000 SQ. FT. OR 36 LINEAR FEET IN ANY ON DIRECTION.

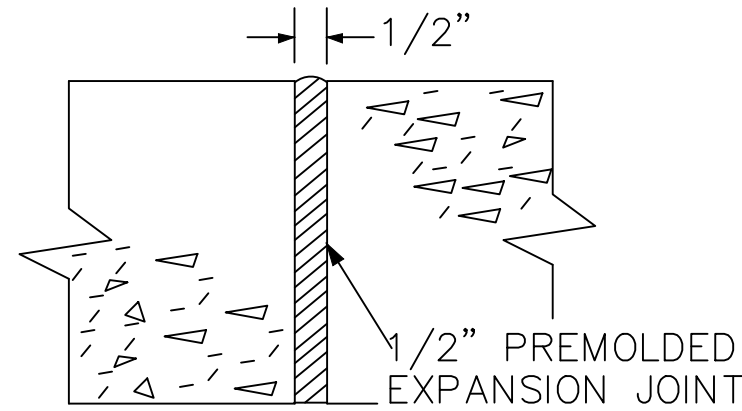
7. APPROVALS:
- A. SUBMIT SHOP DRAWINGS FOR ITEMS 3, 5 AND 6 ABOVE.
- B. SUBMIT LABORATORY REPORTS FOR ITEM 2 ABOVE.

8. COORDINATION:
- A. COORDINATE ALL DIMENSIONS, ELEVATIONS AND OPENINGS WITH ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS. REPORT ANY DISCREPANCIES TO OUR OFFICE.
- B. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE DRAWINGS AND AT THE JOB SITE AND IMMEDIATELY REPORT ANY INCONSISTENCIES TO THE ARCHITECT PRIOR TO FABRICATION.
- C. GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER, IN WRITING, OF ANY DISCREPANCY IN THE DRAWINGS OR INCONSISTENCIES WITH ANY AND ALL APPLICABLE CODES OR REGULATIONS, PRIOR TO ANY ACTION ON HIS PART. FAILURE TO DO SO WILL MAKE HIM RESPONSIBLE AND LIABLE UNDER HIS CONTRACT.

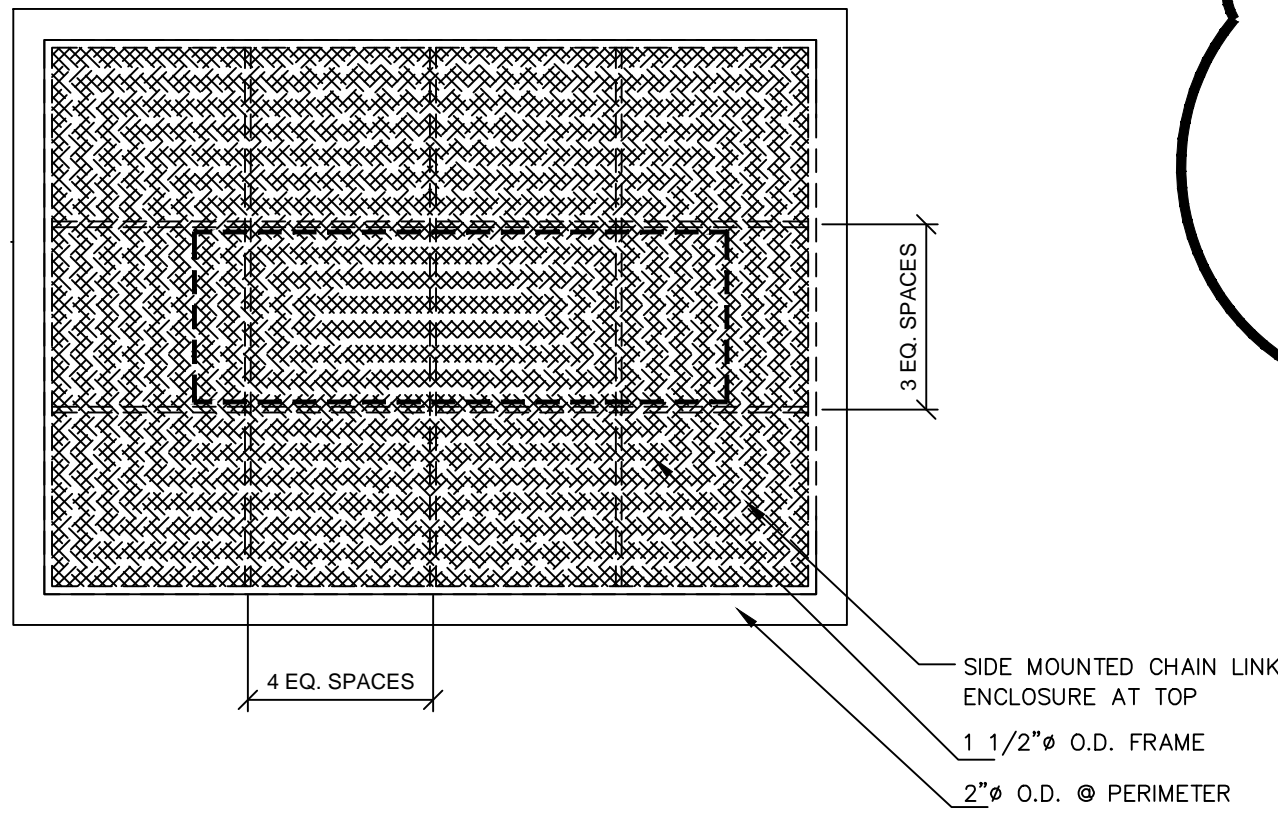


MASONRY REINFORCING DETAIL

N.T.S.

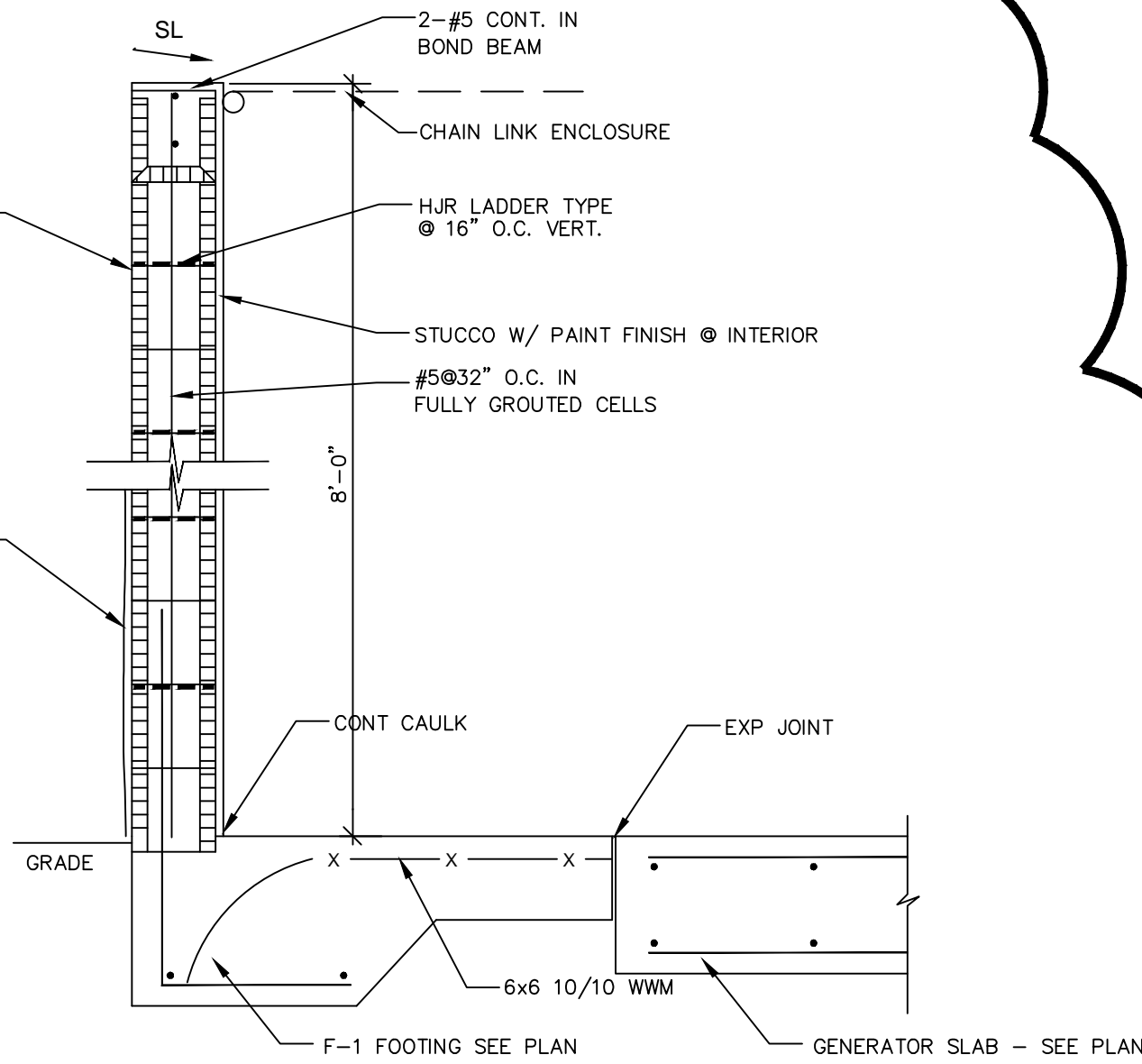


EXPANSION JOINT DETAIL

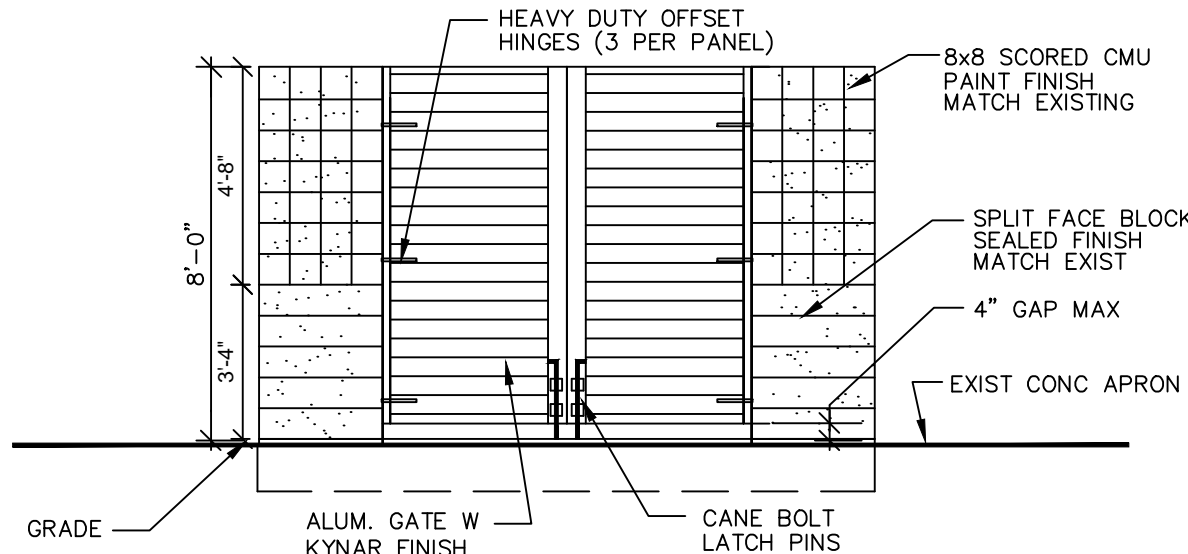


CHAIN LINK FENCE FRAMING PLAN

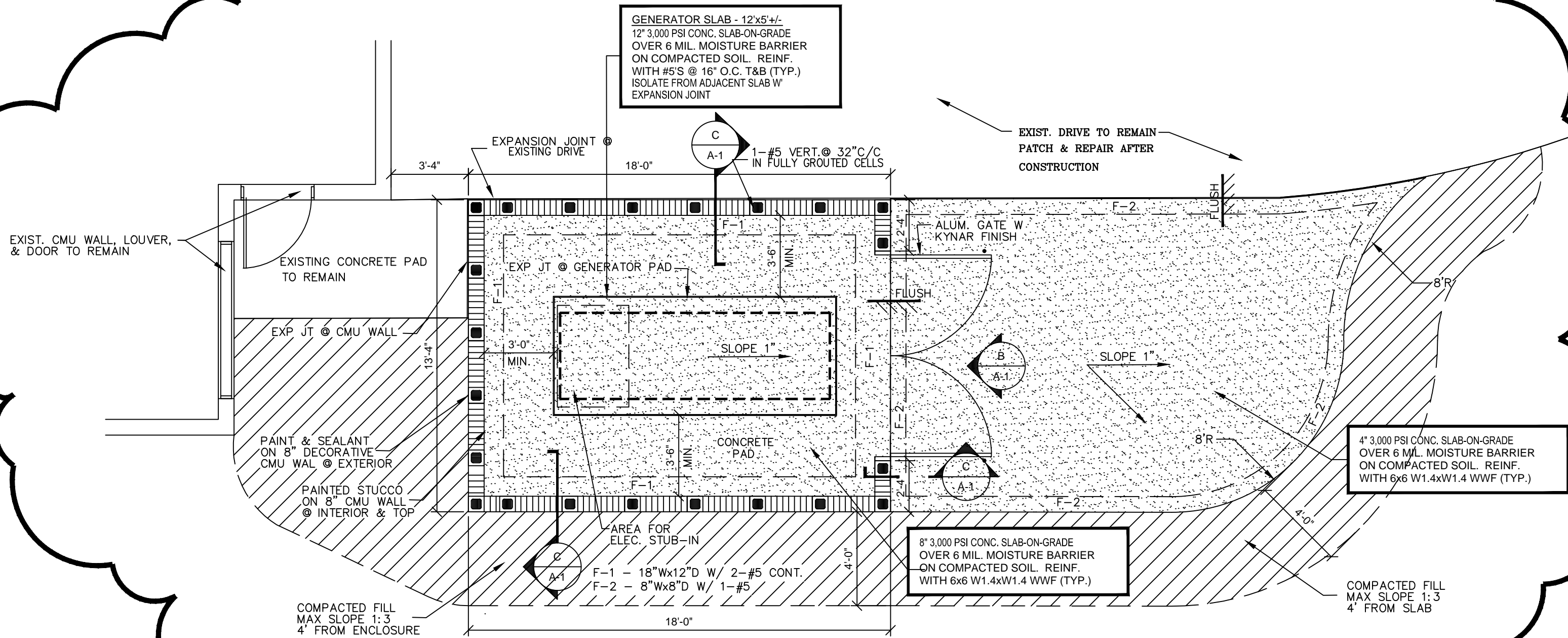
SCALE: 1/4"=1'-0"



SECTION C



FRONT ELEVATION B



GENERATOR ENCLOSURE PLAN A

SCALE: 1/4"=1'-0"

THOMAS J. TWOMEY, P.E.

#26626

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WEST PALM BEACH, FL 33409 Fax: 561 686-5882

REVISIONS		
NO.	TITLE	DATE
1	BID CLARIFICATION	11.2.16

ISSUANCES	
DATE	TITLE
	BID
	PERMIT
	CONSTRUCTION

PRODUCT	CITY OF DELRAY BEACH	
	FIRE STATION No. 5 EMERGENCY GENERATOR	
	4000 Germantown Road Delray Beach, Florida	
SHEET TITLE	GENERATOR PLAN & DETAILS	
	STRUCTURAL REQUIREMENTS	

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4 OF 4	

DELRAYPS 5...



BASIS OF DESIGN: (APPROVED EQUIVALENTS ACCEPTED)



## SG100

### 9.0L



### Industrial Spark-Ignited Generator Set

EPA Certified Stationary Emergency

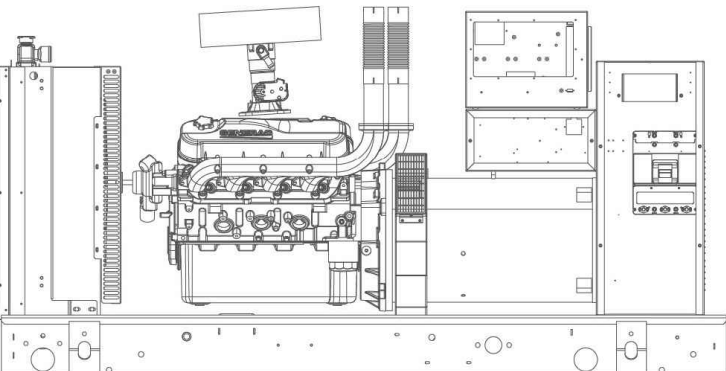
100 kW

**Standby Power Rating**  
100 kW 125 kVA 60 Hz

**Prime Power Rating\***  
90 kW 113 kVA 60 Hz

\*EPA Certified Prime ratings are not available in the U.S. or its Territories



Images used for illustration purposes only

**Codes and Standards**

Generac products are designed to the following standards:

- UL200, UL508, UL142, UL498
- NFPA70, 99, 110, 37
- NEC700, 701, 702, 708
- ISO9001, 8528, 3046, 7537, Plates #2b, 4
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41
- IBC 2009, CBC 2010, IRC 2012, ASCE 7-05, ASCE 7-10, ICS-ES AC-156 (2015)

**Powering Ahead**

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

#### EMERGENCY GENERATOR SPECIFICATIONS

DUEL FUEL, NATURAL GAS, PROPANE GAS GENERATOR, 100kW, 120/208V, 3ø, 4W, EPA TIER 3

THE GENERATOR SHALL BE PROVIDED WITH THE FOLLOWING:  
OVERLOAD PROTECTION CIRCUIT BREAKER  
REMOTE ALARM ANNUNCIATOR SYSTEM  
EMERGENCY STOP PUSHBUTTON  
ENGINE INSTRUMENTS SHOWING:

- ENGINE WATER TEMPERATURE
- LUBE OIL PRESSURE
- LUBE OIL TEMPERATURE
- ENGINE RUNNING HOURMETER
- BATTERY CHARGING INDICATOR
- ENGINE FAULT INDICATORS

ENGINE MOUNTED RADIATOR  
SAFETY CONTROLS TO SHUT DOWN THE ENGINE FOR THE FOLLOWING:  
LOW LUBRICATING OIL PRESSURE  
LOW WATER LEVEL  
HIGH/LOW WATER JACKET TEMPERATURE  
ENGINE OVER SPEED  
ENGINE OVERCRANK

CRITICAL GRADE SILENCER  
WATER JACKET HEATER, 1500W MINIMUM  
ISOCHRONOUS GOVERNOR  
BATTERY CHARGER (10 AMPS), LEAD ACID BATTERIES, BATTERY RACK & CABLES AND CLAMPS

GENERATOR CONTROL PANEL WITH THE FOLLOWING:  
RECESSED FRONT PANEL HINGED  
RUBBER ISOLATOR  
A.C. VOLTMETER, AMMETER, DIAL TYPE FREQUENCY METER  
FUSES  
THREE POSITION SELECTOR SWITCH: MANUAL, OFF/RESET & AUTO  
BATTERY CHARGING VOLTMETER  
ENGINE WATER TEMPERATURE GAUGE  
OIL PRESSURE GAUGE  
D.C. CIRCUIT BREAKER  
SHUTDOWN INDICATORS FOR ALARMS INDICATED ABOVE

WEATHER ENCLOSURE HOUSING

1 YEARS MANUFACTURERS WARRANTY AND A 5 YEAR ENGINE WARRANTY

THE GENERATOR SHALL BE PROVIDED WITH AN AUTOMATIC STARTING SYSTEM TO PROVIDE MULTIPLE CRANK/RESET CYCLES. OPERATION SHALL BE INITIATED THROUGH CLOSING OF CONTACTS IN THE AUTOMATIC TRANSFER SWITCH.

THERE SHALL BE (1) AUTOMATIC TRANSFER SWITCH THAT SHALL BE A SERVICE ENTRANCE RATED 400A/3P, 120/208V, 3ø, 4W WITH AN 400A/3P MAIN BREAKER. PROVIDE ACCESSORY TIMERS AND RELAYS FOR THE GENERATOR SEQUENCE OF OPERATION.

THE TRANSFER SWITCH IS TO BE PROVIDED WITH THE FOLLOWING OPTIONS: SWITCH POSITION: AUX CONTACTS (1) N.C., (1) N.O. SELECTIVE LOAD DISCONNECT CONTACTS WITH TD WHICH OPERATE BEFORE/AFTER TRANSFER

PILOT LIGHTS:

- GREEN – SWITCH IN NORMAL POSITION
- RED – SWITCH IN EMERGENCY POSITION
- WHITE – NORMAL POWER AVAILABLE
- AMBER – EMERGENCY POWER AVAILABLE

7 DAY PLANT EXERCISER, WITH OR WITHOUT LOAD, TEST SWITCH, IN-RUN MONITOR, REMOTE TEST SWITCH CONTACTS, INHIBIT TRANSFER TO EMERGENCY CONTACT, REMOTE TIME DELAY BYPASS SWITCH CONTACTS, LOAD SITE AMMETER

TRANSFER SWITCH SEQUENCE OF OPERATION

COMMERCIAL POWER LOSS:

THE TRANSFER SWITCH SHALL MONITOR COMMERCIAL POWER. UPON COMMERCIAL POWER LOSS, THE TRANSFER SWITCH SHALL SEND A START SIGNAL TO THE GENERATOR. THE GENERATOR SHALL START, UPON CORRECT VOLTAGE & FREQUENCY, THE TRANSFER SWITCH SHALL TRANSFER ALL LOADS TO THE GENERATOR. ALL LOADS MUST BE TRANSFERRED WITHIN 10 SECONDS OF POWER LOSS.

PHASE LOSS:

THE TRANSFER SWITCH SHALL MONITOR COMMERCIAL POWER FOR PHASE LOSS. UPON COMMERCIAL POWER SOURCE LOSS OF ANY PHASE, THE TRANSFER SWITCH SHALL SEND A START SIGNAL TO THE GENERATOR. UPON CORRECT VOLTAGE AND FREQUENCY OF THE GENERATOR SOURCE, THE TRANSFER SWITCH WILL TRANSFER ALL LOADS TO THE GENERATOR WITHIN 10 SECONDS OF PHASE LOSS.

COMMERCIAL SOURCE RETURN:

UPON RETURN OF COMMERCIAL SOURCE, THE TRANSFER SWITCH SHALL MONITOR COMMERCIAL POWER SOURCE FOR 25 MINUTES. IF AFTER 25 MINUTES, COMMERCIAL POWER IS STABLE, THE TRANSFER SWITCH SHALL RE-TRANSFER ALL BUILDING LOADS TO COMMERCIAL POWER AND SHALL START A 5 MINUTE COOL-DOWN OF THE GENERATOR. AFTER 5 MINUTES OF COOL-DOWN, THE TRANSFER SWITCH WILL STOP THE GENERATOR.


#### ELECTRICAL NOTES

1. ELECTRICAL CONTRACTOR SHALL BE FULLY COGNIZANT OF THE LATEST EDITION OF THE 2010 FBC, 2008 NEC, 2009 NFPA101, 2002 NFPA72, 2010 FLORIDA FIRE PREVENTION CODE AND ALL LOCAL CODES, ORDINANCES OF THE AUTHORITIES HAVING JURISDICTION AND PERFORM ALL WORK IN ACCORDANCE WITH THE INTENT AND REQUIREMENTS OF THESE CODES, ORDINANCES AND AUTHORITIES
2. **DO NOT SCALE DRAWINGS:** VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF ALL WORK. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL LAYOUT OF ELECTRICAL SYSTEMS.
3. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN TO "FURNISH AND INSTALL".
4. FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURERS APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
5. PROVIDE WITH SHOP DRAWING SUBMITTAL, 1/4" SCALE LAYOUT DRAWINGS OF AREAS WITH ELECTRICAL SWITCHGEAR AND TRANSFORMERS. LAYOUT SHALL SHOW LOCATIONS OF AND SHALL BE COORDINATED WITH MECHANICAL EQUIPMENT AND MECHANICAL EQUIPMENT SHALL BE DRAWN TO SCALE.
6. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO ESTABLISH A STANDARD OF QUALITY. THE ENGINEER RESERVES THE RIGHT TO APPROVE METHODS AND MATERIALS NOT REFLECTED HEREIN.
7. THE CONTRACTOR SHALL REVIEW ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND SHALL PROVIDE LIGHTS, SWITCHES, RECEPTACLES, TELEPHONE OUTLETS, EQUIPMENT CONNECTIONS, ETC. AND ASSOCIATED CIRCUITING IN NEW AND REMODELED AREAS, EVEN IF SUCH AREAS ARE NOT SHOWN ON THE ELECTRICAL DRAWINGS. LAYOUTS, FIXTURE TYPES, QUANTITIES AND SPACING SHALL BE IN ACCORDANCE WITH SIMILAR AREAS ON THIS PROJECT. THE CONTRACTOR SHALL INCLUDE COSTS FOR THE ABOVE IN HIS BID. IN ADDITION, THE CONTRACTOR SHALL PROVIDE LAYOUT DRAWINGS FOR WORK IN SUCH AREAS AND SUBMIT FOR APPROVAL PRIOR TO ROUGH-IN.
8. THE CONTRACTOR SHALL REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL AND OTHER DRAWINGS PRIOR TO BID AND SHALL COORDINATE ALL TRADES TO PROVIDE A COMPLETE PRODUCT TO AVOID CONFLICTS BETWEEN TRADES, AND TO DETERMINE WHICH TRADE IS TO PERFORM THE NECESSARY WORK. COORDINATION BETWEEN TRADES SHALL INCLUDE LOW VOLTAGE WIRING.
9. PROVIDE SUBSTITUTIONS OF ELECTRICAL EQUIPMENT OR REQUEST FOR "OR EQUIVALENT" OR "APPROVED EQUIVALENT" LISTING SHALL BE SUBMITTED TO THE ARCHITECT NOT LESS THAN TEN (10) WORKING DAYS PRIOR TO BID. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
10. WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE ARCHITECT.
11. ALL EQUIPMENT AND MATERIALS PROVIDED SHALL BE NEW AND IN CONFORMANCE WITH APPLICABLE PROVISIONS OF NEMA, ANSII U.L., ETC AND SHALL BEAR AN APPROVED TESTING AGENCY LABEL WHERE APPLICABLE.
12. PROVIDE PERMITS AND INSPECTIONS AS REQUIRED.
13. GUARANTEE THE INSTALLATION AGAINST DEFECTS IN MATERIALS AND WORKSMANSHIP WHICH MAY OCCUR UNDER NORMAL USAGE FOR A PERIOD OF ONE YEAR AFTER OWNER'S ACCEPTANCE. DEFECTS SHALL BE PROMPTLY REMEDIED WITHOUT COST TO THE OWNER.
14. PROVIDE RECORD DRAWINGS TO THE BUILDING OWNER AND ARCHITECT WITHIN 30 DAYS AFTER SYSTEM ACCEPTANCE, PER FBC 13-413.1.ABC.2.1. DRAWINGS SHALL INCLUDE ALL ADDENDUM ITEMS, CHANGE ORDERS, ALTERATIONS, REROUTINGS, ETC.
15. VERIFY EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN. MODIFICATIONS REQUIRED DUE TO LACK OF COORDINATION BY CONTRACTORS, WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
16. SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, THE CONTRACTOR SHALL MAKE CORRECTIONS NECESSARY AT NO COST TO THE OWNER.
17. THE CONTRACTOR SHALL PROVIDE OPERATING MANUALS TO THE OWNER, PER FBC 13-413.1.ABC.2.2.
18. THE CONTRACTOR SHALL COORDINATE WITH FPL ALL REQUIREMENTS FOR CONDUIT ENTRY AND CABLE TERMINATIONS IN THE UTILITY TRANSFORMER. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO COMMENCEMENT OF WORK.
19. GENERATOR SYSTEM SHALL BE COMPLETE AND OPERABLE AND SHALL INCLUDE REQUIRED ACCESSORIES, FUEL TANKS, PIPING, MUFFLER, BLOCK HEATER, BATTERY CHARGER, ETC. THE CONTRACTOR SHALL COORDINATE THE LOCATION FOR A REMOTE CONTROL PANEL.
20. WIRE SHALL BE COPPER, 75 DEGREES C RATED FOR GENERAL USE, FOR HID FIXTURES AND WIRING WITHIN 3 INCHES OF FLUORESCENT BALLAST WIRE SHALL BE COPPER, MINIMUM 90 DEGREES C RATED. SIZES INDICATED ARE FOR INSTALLATION IN A MAXIMUM 30 DEGREES C AMBIENT. CONDUCTOR AMPACITY SHALL BE DERATED FOR HIGHER AMBIENT INSTALLATIONS. THE CONTRACTOR SHALL INCREASE THE SIZE OF THE CONDUCTOR TO MEET VOLTAGE DROP REQUIREMENTS WHERE FIELD CONDITIONS INCREASE THE CONDUIT RUN LENGTH SUCH THAT THE VOLTAGE DROP IS EFFECTED.
21. SPLICES IN EXTERIOR PULL BOXES OR MANHOLES SHALL BE MADE WATER PROOF USING "SCOTCHCAST" SPLICE KIT OR APPROVED EQUIVALENT. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCT SEAL" OR APPROVED EQUIVALENT
22. PRESENT SHOP DRAWING SUBMITTAL DATA AT ONE TIME, BOUND IN THREE-RING BINDERS, INDEXED IN A NEAT AND ORDERLY MANNER. PARTIAL SUBMITTALS WILL NOT BE ACCEPTED. SUBMITTALS SHALL INCLUDE, BUT NOT BE LIMITED TO: LIGHTING FIXTURES, SWITCHGEAR, PANELBOARDS, WIRING DEVICES, SAFETY SWITCHES, FUSES, MOTOR STARTERS, LAMPS, CONDUIT, CONDUIT FITTINGS AND TRANSFORMERS.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING PROVIDED UNDER THIS SECTION OR FACTORY WIRING IN EQUIPMENT PROVIDED UNDER THIS SECTION.
24. CONTRACTOR'S FAILURE TO ORDER OR RELEASE ORDER FOR MATERIALS AND/OR EQUIPMENT WILL NOT BE ACCEPTED AS A REASON TO SUBSTITUTE ALTERNATE MATERIAL, EQUIPMENT OR INSTALLATION METHODS.
25. SYSTEMS SHALL BE COMPLETE, OPERABLE AND READY FOR CONTINUOUS OPERATION. LIGHTS, SWITCHES, RECEPTACLES, MOTORS, ETC., SHALL BE CONNECTED AND OPERABLE.
26. VERIFY EXACT LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, PIPING AND RACEWAY SYSTEMS PRIOR TO TRENCHING. PROVIDE NECESSARY TRENCHING, BACKFILL, EXCAVATION, SUPPORTS, SERVICE FEEDERS (CONDUIT AND/OR WIRE), PULL BOXES, TRANSFORMER PAD, SAW CUTTING AND PATCHING, CONCRETE/PAVING, ETC., REQUIRED BACKFILL TRENCHED TO BOX COMPACTION AND PATCH TO MATCH EXISTING. CONTRACTOR SHALL OBTAIN AND VERIFY EXACT UTILITY COMPANY DRAWINGS AND REQUIREMENTS.
27. PULL BOXES, CABINETS, ETC., MOUNTED ON THE EXTERIOR AT GRADE LEVEL, SHALL BE WEATHER PROOF TYPE WITH HINGED LOCKABLE COVERS SECURED WITH TAMPER-PROOF SCREWS.
28. PANEL DIRECTORIES SHALL BE REMOVABLE. SUBMIT PROPOSED SCHEDULE OF DIRECTORIES TO OWNER FOR APPROVAL. ROOM NAMES AND NUMBERS SHALL BE AS DIRECTED BY OWNER. DIRECTORIES SHALL BE TYPED AND INSTALLED UNDER CLEAR PLASTIC COVERS.
29. VOLTAGE DROP CALCULATIONS ON ALL FEEDERS AND BRANCH CIRCUITS HAVE BEEN PERFORMED IN ACCORDANCE WITH THE STATE OF FLORIDA ENERGY CODE CHAPTER 13 (13-413.1.ABC.1.1 & 13-413.1.ABC.1.2). THE CONTRACTOR IS RESPONSIBLE TO BE FAMILIAR WITH CHAPTER 13 AND SHALL UPSIZE THE CONDUCTORS FOR FEEDER AND BRANCH CIRCUITS BASED ON THE ACTUAL ROUTING IN THE FIELD.
30. ADDITIONAL NOTES FOR NEW PANELBOARDS:
  - A. PROVIDE LIGHTING AND RECEPTACLE PANELS AS INDICATED ON THE PLANS AND AS SPECIFIED HEREIN. ALL PANELS SHALL BE DEAD FRONT, CIRCUIT BREAKER TYPE, AND SHALL BEAR THE U.L. LABEL AS WELL AS MEET ALL APPLICABLE NEMA REQUIREMENTS.
  - B. UNLESS OTHERWISE NOTED, TOP OF PANELS SHALL BE MOUNTED 6'-0" A.F.F.
  - C. ALL PANELS SHALL HAVE TYPEWRITTEN CIRCUIT DIRECTORIES MOUNTED INSIDE OF DOOR.
  - D. PANELS SHALL BE SUITABLE FOR THE SERVICE RATING AND THE A.I.C. RATING INDICATED ON THE PANEL SCHEDULES.
  - E. ALL BREAKERS SHALL BE FULL SPACE, INDIVIDUAL FRAME TYPE, BOLT-ON E-TYPE. NO "PIGGY-BACK" OR TANDEM BREAKERS WILL BE PERMITTED.
  - F. CONTRACTOR SHALL PROVIDE ON ALL FLUSH (RECESSED) MOUNTED PANELS TWO (2), SPARE 2" CONDUITS STUBBED INTO THE CEILING SPACE.
  - G. ALL CURRENT CARRYING BUS BARS SHALL BE COPPER.

NOTE:

ALTERNATE GENERATOR MANUFACTURERS ARE ACCEPTABLE. PLEASE REFER TO SPEC SECTION 263213 FOR THE GENERATOR SPEC.

SG100 100 kW



## SG100

**Standard Features**

**ENGINE SYSTEM**

- General
  - Oil Drain Extension
  - Air Cleaner
  - Fan Guard
  - Stainless Steel flexible exhaust connection
  - Critical Exhaust Silencer
  - Factory Filled Oil
  - Radiator duct adapter (open set only)
- Fuel System
  - Primary and Secondary Fuel Shutoff
  - Flexible Fuel Line - NPT Connection
- Cooling System
  - Closed Coolant Recovery System
  - UV/Inert resistant hoses
  - Factory-installed Radiator
  - Radiator drain extension
  - 50/50 Ethylene glycol antifreeze
- Engine Electrical System
  - Battery charging alternator
  - Battery Cables
  - Battery Tray
  - Solenoid actuated starter motor
  - Rubber-booted engine electrical connections

**ALTERNATOR SYSTEM**

- UL2200 GENprotect™
- Class H insulation material
- 23 Pich
- Skewed Stator
- Brushless Excitation
- Sealed Bearings
- Auxiliary winding
- Full load capacity alternator


**GENERATOR SET**

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

**ENCLOSURE (if selected)**

- Rust proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air intake louvers
- Air discharge hoods for radiator upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

**CONTROL SYSTEM**




- Control Panel
  - Digital H Control Panel - Dual 4/20 Display
  - Programmable Crank Limiter
  - 7-Day Programmable Generator
  - Special Applications Programmable PLC
  - RS-232/485
  - All-Phase Sensing DVR
  - Full System Status
  - Utility Monitoring
  - Low Fuel Pressure Indication
  - 2-Wire Start Compatible
  - Power Output (kW)
  - Power Factor
  - kWh Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Idle/Time Fault History (Event Log)
- Isynchronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not In-Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection

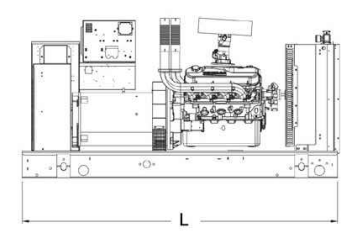
- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display
- Alarms
  - Oil Pressure (Pre-programmable Low Pressure Shutdown)
  - Coolant Temperature (Pre-programmed High Temp Shutdown)
  - Coolant Level (Pre-programmed Low Level Shutdown)
  - Low Fuel Pressure Alarm
  - Engine Speed (Pre-programmed Over speed Shutdown)
  - Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings specified out (no alarm codes)

SG100 100 kW

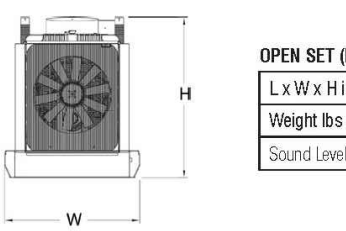


## SG100

### dimensions, weights, and sound levels



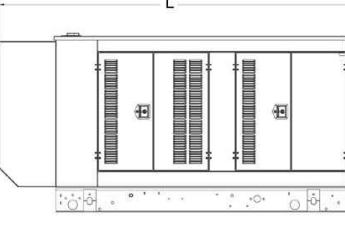
L  
W  
H



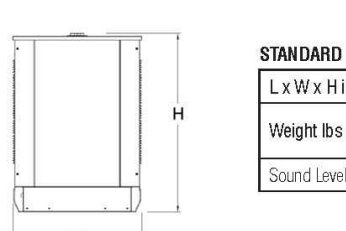
L  
W  
H

**OPEN SET (Includes Exhaust Flue)**

L x W x H in (mm)	94.2 (2394) x 40 (1016) x 47.5 (1206)
Weight lbs (kg)	2064 (936.2)
Sound Level (dBA")	88.8



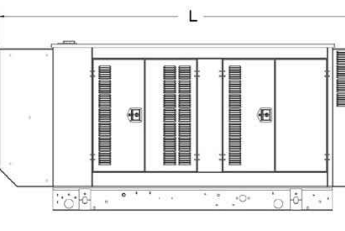
L  
W  
H



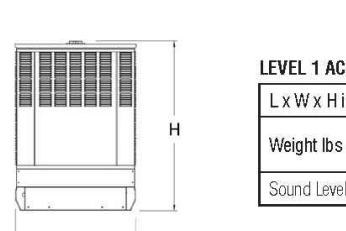
L  
W  
H

**STANDARD ENCLOSURE**

L x W x H in (mm)	111.79 (2839.5) x 40.48 (1027.8) x 56.18 (1427)
Weight lbs (kg)	Sheet: 2708 (1226) Aluminum: 2413 (1094)
Sound Level (dBA")	79.7



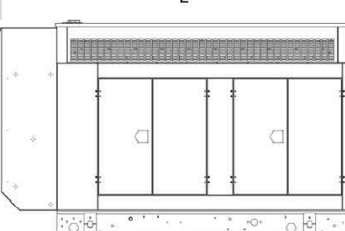
L  
W  
H



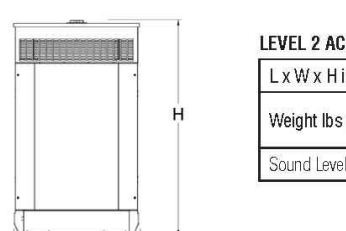
L  
W  
H

**LEVEL 1 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	125.42 (3287.2) x 40.48 (1027.8) x 56.18 (1427)
Weight lbs (kg)	Sheet: 2798 (1269.2) Aluminum: 2451 (1105)
Sound Level (dBA")	75.5



L  
W  
H



L  
W  
H

**LEVEL 2 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	111.81 (2840) x 40.48 (1027.8) x 68.61 (1742.8)
Weight lbs (kg)	Sheet: 3022 (1370.8) Aluminum: 2451 (1105)
Sound Level (dBA")	70.8

\*All measurements are approximate and for estimation purposes only. Sound levels measured at 23 ft (7 m) and does not account for ambient site conditions.

**YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER**

Resonance characteristics may change without notice. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

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#### WIRE SCHEDULE KEY NOTE

①	4#600MCM, 4°C
②	1#3/0 GROUNDING ELECTRODE CONDUCTOR TO EXISTING GROUNDING ELECTRODE
③	EXISTING 1#6 BONDING CONDUCTOR
④	4#600MCM, 1#3G, 3-1/2°C
⑤	EXISTING SERVICE CONDUCTORS FROM FPL TRANSFORMER TO NEW J-BOX TO REMAIN

BUILDING LOAD PROVIDED BY FPL:

HIGHEST KWD OVER PAST 12 MONTHS: 30KWD  
BUILDING LOAD AT 125%: 40KW

GENERATOR SIZE: 100KW

KEY NOTES:

- ① PROVIDE NEW 400A/3P SERVICE ENTRANCE RATED, AUTOMATIC TRANSFER SWITCH. SWITCH SHALL HAVE A NEMA 3R ENCLOSURE.
- ② PROVIDE NEW 100KW NATURAL GAS FUEL GENERATOR IN A LEVEL 1 WEATHER HOUSING. SEE THIS SHEET FOR ENCLOSURE HOUSING.
- ③ EXISTING SERVICE CONDUCTORS TO BUILDING SHALL BE INTERCEPTED NEAR THE NEW SERVICE RATED TRANSFER SWITCH, AND REROUTED TO THE NEW MDP. REFER TO THE RISER DIAGRAM FOR ADDITIONAL INFORMATION.

\_\_\_\_\_ DENOTES EXISTING TO REMAIN  
 \_\_\_\_\_ DENOTES PROVIDE NEW

#### PARTIAL ELECTRICAL RISER DIAGRAM

N.T.S.

PERMIT SET 12-05-14

#### NOTE

THESE DRAWINGS ARE PREPARED PER ESTABLISHED INDUSTRY STANDARDS AND REPRESENT THE ENGINEERS DESIGN CONCEPT. THEY ARE NOT INTENDED TO PROVIDE EVERY DETAIL OR CONDITION REQUIRED TO CONSTRUCT THE BUILDING. THE CONTRACTOR THROUGH SUBMITTALS AND OTHER COORDINATION EFFORTS IS FULLY RESPONSIBLE FOR PROVIDING A COMPLETE AND OPERATIONAL BUILDING WHETHER INDICATED ON THE PLANS OR NOT.

## DELRAY BEACH FIRE DEPT. STATION #5 GENERATOR REPLACEMENT

Plot Date: 1-26-14  
Xref(s): 14113F55

Cadd File:

Design By: AJY, AA  
Drawn By: AJY, AA  
Checked By: AJY, DET

Date Issued: AS SHOWN  
Scale: AS SHOWN  
Sheet: OF

ELECTRICAL NOTES,  
LEGEND AND DETAILS

4000 OLD GERMANTOWN ROAD  
DELRAY BEACH, FLORIDA

THOMPSON & YOUNGROSS ENGINEERING CONSULTANTS, LLC

CERTIFICATE OF AUTHORIZATION NO. 25996  
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 Y: 561.274.0200 F: 561.274.0222 E: tec@teclla.com www.teclla.com

HVAC  
PLUMBING  
ELECTRICAL

Description

Date

Revision

Revision

Revision

Revision

Revision

Revision

Revision

Revision

Revision

Revision

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Revision

Revision