

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK  
**CITY OF PORTLAND**

Please Read  
 Application And  
 Notes, If Any,  
 Attached

BUILDING INSPECTION  
**PERMIT**

Permit Number: 091378

PERMIT ISSUED

This is to certify that MECHANICAL SERVICES INC. Mechanical Services, Inc

has permission to install an emergency generator for power outages w/ electrical exhaust silencer

AT 400 PRESUMPSCOT ST

CB 4422 B015001

DEC 30 2009

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. CAPT. R. Gauthier

Health Dept. \_\_\_\_\_

Appeal Board \_\_\_\_\_

Other \_\_\_\_\_

Department Name

Director - Building & Inspection Services

**PENALTY FOR REMOVING THIS CARD**

**City of Portland, Maine - Building or Use Permit Application**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 09-1378	Issue Date:	CBL: 422 B015001
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Location of Construction: 400 PRESUMPCOT ST	Owner Name: MECHANICAL SERVICES INC	Owner Address: 400 PRESUMPCOT ST	Phone:
Business Name:	Contractor Name: Mechanical Services, Inc	Contractor Address: 400 Presumpscot St Portland	Phone 2077741531
Lessee/Buyer's Name	Phone:	Permit Type: Generator	Zone: I-L

Past Use: Commercial	Proposed Use: Commercial - install an emergency generator for power outages w/ critical exhaust silencer	Permit Fee: \$270.00	Cost of Work: \$25,000.00	CEO District: 4
Proposed Project Description: install an emergency generator for power outages w/ critical exhaust silencer <i>ONLY emergency use</i>		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <i>* See Conditions</i>	INSPECTION: Use Group: <i>U</i> Type: <i>IBC 2003</i>	
		Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	
		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)		
		Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied		
		Signature: _____ Date: _____		

Permit Taken By: Ldobson	Date Applied For: 12/03/2009	<b>Zoning Approval</b>		
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<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..</p>	<p>Special Zone or Reviews</p> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input checked="" type="checkbox"/> Site Plan <i>exemption</i> <i>Applied for</i> Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> <i>OK with conditions</i> Date: <i>12/14/09</i>	<p>Zoning Appeal</p> <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date: _____	<p>Historic Preservation</p> <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: _____
	<p><b>PERMIT ISSUED</b></p> <p>DEC 30 2009</p> <p>City of Portland</p>		

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

## BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY )

to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

**By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.**

**A Pre-construction Meeting will take place upon receipt of your building permit.**

Footing/Building Location Inspection: Prior to pouring concrete or setting precast piers

Re-Bar Schedule Inspection: Prior to pouring concrete

Final inspection required at completion of work.

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection.

**If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.**

**CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED.**

\_\_\_\_\_  
Signature of Applicant/Designee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Inspections Official

\_\_\_\_\_  
Date

PERMIT ISSUED

DEC 30 2005

City of Portland

**City of Portland, Maine - Building or Use Permit**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

<b>Permit No:</b> 09-1378	<b>Date Applied For:</b> 12/03/2009	<b>CBL:</b> 422 B015001
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<b>Location of Construction:</b> 400 PRESUMPCOT ST	<b>Owner Name:</b> MECHANICAL SERVICES INC	<b>Owner Address:</b> 400 PRESUMPCOT ST	<b>Phone:</b>
<b>Business Name:</b>	<b>Contractor Name:</b> Mechanical Services, Inc	<b>Contractor Address:</b> 400 Presumpscot St Portland	<b>Phone</b> (207) 774-1531
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> Generator	

<b>Proposed Use:</b> Commercial - install an emergency generator for power outages w/ critical exhaust silencer	<b>Proposed Project Description:</b> install an emergency generator for power outages w/ critical exhaust silencer
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<b>Dept:</b> Zoning	<b>Status:</b> Approved with Conditions	<b>Reviewer:</b> Marge Schmuckal	<b>Approval Date:</b> 12/04/2009
<b>Note:</b>			<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
1) This generator is only for emergency use. Any permanent use will need a separate review and approval.			
<b>Dept:</b> Building	<b>Status:</b> Approved	<b>Reviewer:</b> Tammy Munson	<b>Approval Date:</b> 12/30/2009
<b>Note:</b>			<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
<b>Dept:</b> Fire	<b>Status:</b> Approved with Conditions	<b>Reviewer:</b> Capt Keith Gautreau	<b>Approval Date:</b> 12/15/2009
<b>Note:</b>			<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
1) Install shall comply with all manufacture's specifications.			

<b>Comments:</b>
12/4/2009-mes: Wait for the site plan exemption sign off from planning.
12/23/2009-gg: received granted site plan exemption as of 12/23/09. /gg Put exemption with permit in plan reviewer's basket.



# General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>400 PRESUMPSCOT ST. PORTLAND.</u>		
Total Square Footage of Proposed Structure/Area <u>32</u>	Square Footage of Lot <u>.507 ACRES</u>	Number of Stories <u>N/A</u>
Tax Assessor's Chart, Block & Lot Chart#      Block#      Lot# <u>422-B-015-001</u> <u>422-B-15</u> <u>PLEASE SEE ATTACHED</u>	Applicant * <u>must</u> be owner, Lessee or Buyer* Name <u>CHRISTOPHER GREEN</u> Address <u>400 PRESUMPSCOT ST.</u> City, State & Zip <u>PORTLAND, ME 04103</u>	Telephone: <u>(207) 774-1531</u> <u>(207) 831-2365</u>
Lessee/DBA (If Applicable)	Owner (if different from Applicant) Name Address City, State & Zip	Cost Of Work: \$ <u>25,000</u> C of O Fee: \$ _____ Total Fee: \$ <u>270</u>
Current legal use (i.e. single family) <u>Commercial</u> Number of Residential Units <u>N/A</u> If vacant, what was the previous use? _____ Proposed Specific use: _____ Is property part of a subdivision? <u>NO</u> If yes, please name _____ Project description: <u>INSTALL AN EMERGENCY GENERATOR. ONLY TO BE USED DURING POWER OUTAGES. UNIT WILL HAVE AN CRITICAL EXHAUST SILENCER</u>		
Contractor's name: <u>MECHANICAL SERVICES INC.</u> Address: <u>400 PRESUMPSCOT ST.</u> City, State & Zip <u>PORTLAND, ME 04103</u> Telephone: <u>(207) 774 1531</u> Who should we contact when the permit is ready: <u>CHRIS GREEN</u> Telephone: <u>(207) 831-2365</u> Mailing address: <u>400 PRESUMPSCOT ST. PORTLAND, ME 04103</u>		

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at [www.portlandmaine.gov](http://www.portlandmaine.gov), or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature: Chris Green

Date: 12-2-09

This is not a permit; you may not commence ANY work until the permit is issued.

RECEIVED  
DEC - 3 2009  
Building Inspections  
City of Portland, Maine



**MAINE CONTROLS**  
**MECHANICAL**  
**SERVICES, INC.**  
mechanicalservices.com

400 PRESUMPSCOT STREET  
PORTLAND, ME 04103-5292

TEL. (207) 774-0220  
FAX (207) 774-3837

72 FREEDOM PARKWAY  
HERMON, ME 04401-5788

TEL. (207) 848-5544  
FAX (207) 848-5592

76 CENTER ROAD  
EASTON, ME 04740-0377

TEL. (207) 488-6199  
FAX (207) 488-6023

December 2, 2009

Mechanical Services, Inc., details for emergency generator.

Owner: Christopher Green.  
Mechanical Services, Inc.  
400 Presumpscot St.  
Portland, Maine 04103.

Telephone number (207) 774 1531. Cellular phone (207) 831 2365.

We would like to install a Kohler emergency generator for our building located at 400 Presumpscot Street. The generator specifications are attached for your review.

The generator would only be used during a power outage. We have purchased the generator with a Critical Exhaust Silencer. The expected sound level would be 80 dba at 23 feet.

The generator will sit on a concrete pad custom made by Swan's Wilbert Vault Co. The pad is 4' wide, 8' long and 4" thick. The pad will sit on a 6 inch to 8 inch gravel base.

We have included a site plan showing where we would like to set the new generator. This is adjacent to the electrical entrance for our building.

Our account number is 42818. CBL 422-B-015-001. Presumpscot St 402-408 22100SF.

Seabee Electric located at 84 Pleasant Hill Road, Scarborough, Maine, will be the electrical sub-contractor for the project. Their telephone number is (207) 883-5448. Contact name Bill Johnson.

The cost of the entire project is approximately \$25,000.00 including all material and labor.

The generator will be set 3' from our building. The generator will be approximately 20' from the adjoining property line.



# Application for Exemption from Site Plan Review

Portland, Maine

Department of Planning and Urban Development, Planning Division and Planning Board

PROJECT NAME: MECHANICAL SERVICES, INC.

PROJECT ADDRESS: 400 PRESUMPCOT ST.

PROJECT DESCRIPTION: (Please Attach Sketch/Plan of Proposal/Development)

INSTALLATION OF AN EMERGENCY GENERATOR.

CHART/BLOCK/LOT: 422-B-015-001

CONTACT INFORMATION:

OWNER/APPLICANT

Name: CHRIS GREEN  
Address: 400 PRESUMPCOT ST.  
PORTLAND, ME  
Zip Code: 04103  
Work #: (207) 774-1531  
Cell #: (207) 831-2365  
Fax #: (207) 553-2865  
Home #: (207) 831-2365  
E-mail: cgreen@mechanicalservices.com

CONSULTANT/AGENT

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Work #: \_\_\_\_\_  
Cell #: \_\_\_\_\_  
Fax #: \_\_\_\_\_  
Home #: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Criteria for Exemptions:

(See Section 14-523 (4) on page 2 of this application)

	Applicant's Assessment Y(yes), N(no), N/A	Planning Division Use Only
a) Is the proposal within existing structures?	<u>NO</u>	_____
b) Are there any new buildings, additions, or demolitions?	<u>NO</u>	_____
c) Is the footprint increase less than 500 sq. ft.?	<u>NO</u>	_____
d) Are there any new curb cuts, driveways or parking areas?	<u>NO</u>	_____
e) Are the curbs and sidewalks in sound condition?	<u>YES</u>	_____
f) Do the curbs and sidewalks comply with ADA?	<u>YES</u>	_____
g) Is there any additional parking?	<u>NO</u>	_____
h) Is there an increase in traffic?	<u>NO</u>	_____
i) Are there any known stormwater problems?	<u>NO</u>	_____
j) Does sufficient property screening exist?	<u>YES</u>	_____
k) Are there adequate utilities?	<u>YES</u>	_____

Planning Division Use Only

Exemption Granted \_\_\_\_\_ Partial Exemption \_\_\_\_\_ Exemption Denied \_\_\_\_\_

Planner's Signature \_\_\_\_\_ Date \_\_\_\_\_

Swan's Wilbert Vault Co.

674 Bridgton Road  
Westbrook, ME 04092Date      W.O. No.  
11/12/2009      2404

Work Order

Service Date      11/12/2009

Name / Address

Mechanical Services  
400 Presumscot St.  
Portland, Maine 04103  
Contractor Price

Delivery Details

Customer Phone

774 1531

P.O. No.

S38535

Project

Item	Description	Ordered	U/M
CUSTOM	Custom made product 3' x 6' x 4"	1	
CUSTOM	Custom made product 4' x 8 x 4" with cutout (see drawing)	1	
DEL	Delivery (if both delivered at the same time and in a 3-5 day window)	1	

cgreen@mechanicalservices.com

Sales Tax





Model: **60REOZJC**

**KOHLER**.POWER SYSTEMS

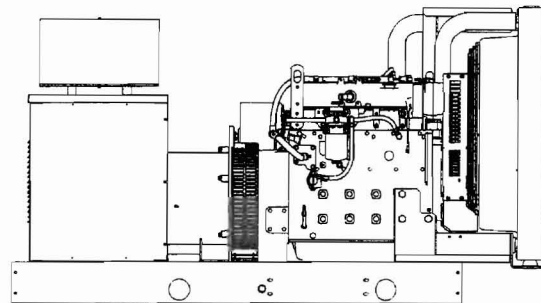
208-600 V

Diesel



### Ratings Range

		60 Hz	
Standby:	kW	49-60	
	kVA	49-75	
Prime:	kW	45-54	
	kVA	45-68	



### Generator Set Ratings

Alternator	Voltage	Ph	Hz	130°C Rise Standby Rating		105°C Rise Prime Rating	
				kW/kVA	Amps	kW/kVA	Amps
4P8	120/208	3	60	60/75	208	54/68	187
	127/220	3	60	60/75	197	54/68	177
	120/240	3	60	60/75	180	54/68	162
	120/240	1	60	49/49	204	45/45	188
	139/240	3	60	60/75	180	54/68	162
	220/380	3	60	55/69	104	50/63	95
	277/480	3	60	60/75	90	54/68	81
	347/600	3	60	50/63	60	45/56	54
4P10	120/208	3	60	60/75	208	54/68	187
	127/220	3	60	60/75	197	54/68	177
	120/240	3	60	60/75	180	54/68	162
	120/240	1	60	54/54	225	50/50	208
	139/240	3	60	60/75	180	54/68	162
	220/380	3	60	60/75	114	54/68	103
	277/480	3	60	60/75	90	54/68	81
4V7	120/240	1	60	57/57	238	51/51	213

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. *Standby Ratings:* Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. *Prime Power Ratings:* Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. For limited running time and base load ratings, consult the factory. Obtain the technical information bulletin (TIB-101) on ratings guidelines for the complete ratings definitions. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. GENERAL GUIDELINES FOR DERATION: *Altitude:* Derate 0.5% per 100 m (328 ft.) elevation above 2300 m (7546 ft.). *Temperature:* Derate 1.0% per 10°C (18°F) temperature above 25°C (77°F).

### Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- The generator set complies with ISO 8528-5, Class G2, requirements for transient performance in all generator set configurations. Select the Decision-Maker<sup>®</sup> 550 controller for improved voltage regulation and ISO 8528-5, Class G3, compliance.
- The 60 Hz generator set engine is certified by the Environmental Protection Agency (EPA) to conform to Tier 3 nonroad emissions regulations.
- A one-year limited warranty covers all systems and components. Two-, five-, and ten-year extended warranties are also available.
- Alternator features:
  - The unique Fast-Response™ II excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
  - Controllers are available for all applications. See controller features inside.
  - The low coolant level shutdown prevents overheating (standard on radiator models only).
  - Integral vibration isolation eliminates the need for under-unit vibration spring isolators.

## Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet
Leads: quantity, type	12, Reconnectable
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	
Permanent magnet (PM) alternator	±2% Average
550 controller (with 0.5% drift due to temperature variation)	3-Phase Sensing, ±0.25%
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V 4P8 (12 lead)	212
480 V 4P10 (12 lead)	250
240 V 4V7 (4 lead)	215

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Vacuum-impregnated windings with fungus-resistant epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.
- Fast-Response™ II brushless alternator with brushless exciter for excellent load response.

## Application Data

### Engine

Engine Specifications	
Manufacturer	John Deere
Engine model	5030HF285G
Engine type	4-Cycle, Turbocharged
Cylinder arrangement	5 Inline
Displacement, L (cu. in.)	3.0 (186)
Bore and stroke, mm (in.)	86 x 105 (3.39 x 4.13)
Compression ratio	18.2:1
Piston speed, m/min. (ft./min.)	375 (1230)
Main bearings: quantity, type	6, Replaceable Insert
Rated rpm	1800
Max. power at rated rpm, kWm (BHP)	72 (97)
Cylinder head material	Cast Iron
Crankshaft material	Ductile Iron
Valve material:	
Intake	Chromium-Silicon Steel
Exhaust	Stainless Steel
Governor: type, make/model	JDEC Electronic, Level 18, EUP
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±0.25%
Frequency	Field-Convertible
Air cleaner type, all models	Dry

### Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust flow at rated kW, m <sup>3</sup> /min. (cfm)	13.8 (488)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	524 (976)
Maximum allowable back pressure, kPa (in. Hg)	7.5 (2.2)
Exhaust outlet size at engine hookup, mm (in.)	64.0 (2.5)

### Engine Electrical

Engine Electrical System		
Battery charging alternator:		
Ground (negative/positive)		Negative
Volts (DC)		12
Ampere rating		70
Starter motor rated voltage (DC)		12
Battery, recommended cold cranking amps (CCA):		
Quantity, CCA rating		One, 640
Battery voltage (DC)		12

### Fuel

Fuel System		
Fuel supply line, min. ID, mm (in.)		11.0 (0.44)
Fuel return line, min. ID, mm (in.)		6.0 (0.25)
Max. lift, engine-driven fuel pump, m (ft.)		3.0 (10.0)
Max. fuel flow, Lph (gph)		82 (21.7)
Fuel prime pump		Manual
Fuel filter		
Secondary		5 Microns @ 98% Efficiency
Water Separator		Yes
Recommended fuel		#2 Diesel

### Lubrication

Lubricating System		
Type		Full Pressure
Oil pan capacity, L (qt.)		10.4 (11.0)
Oil pan capacity with filter, L (qt.)		11.3 (11.9)
Oil filter: quantity, type		1, Cartridge
Oil cooler		Water-Cooled

## Application Data

### Cooling

#### Radiator System

Ambient temperature, °C (°F)*	50 (122)
Engine jacket water capacity, L (gal.)	3.4 (0.9)
Radiator system capacity, including engine, L (gal.)	11.0 (2.9)
Engine jacket water flow, Lpm (gpm)	98 (26)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	45.9 (2612)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	13.0 (740)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	597 (23.5)
Fan, kWm (HP)	4.1 (5.5)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H <sub>2</sub> O)	0.125 (0.5)

\* Enclosure reduces ambient temperature capability by 5°C (9°F).

### Operation Requirements

#### Air Requirements

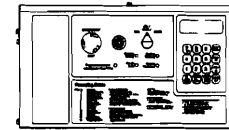
Radiator-cooled cooling air, m <sup>3</sup> /min. (scfm)‡	96 (3400)
Combustion air, m <sup>3</sup> /min. (cfm)	5.3 (187)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	15.5 (880)
Alternator, kW (Btu/min.)	8.9 (505)

‡ Air density = 1.20 kg/m<sup>3</sup> (0.075 lbm/ft<sup>3</sup>)

#### Fuel Consumption

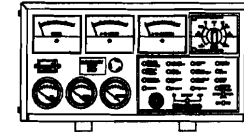
Diesel, Lph (gph) at % load	Standby Rating
100%	19.1 (5.0)
75%	14.4 (3.8)
50%	10.1 (2.7)
25%	6.0 (1.6)
Diesel, Lph (gph) at % load	Prime Rating
100%	17.5 (4.6)
75%	13.1 (3.5)
50%	9.2 (2.4)
25%	5.8 (1.5)

## Controllers



#### Decision-Maker<sup>®</sup> 550 Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Programmable microprocessor logic and digital display features. Alternator safeguard circuit protection. 12- or 24-volt engine electrical system capability. Remote start, remote annunciation, and remote communication options. Refer to G6-46 for additional controller features and accessories.



#### Decision-Maker<sup>®</sup> 3+, 16-Light Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Microprocessor logic, AC meters, and engine gauge features. 12- or 24-volt engine electrical system capability. Remote start, prime power, and remote annunciation options. Refer to G6-30 for additional controller features and accessories.

## Additional Standard Features

- Alternator Protection (standard with 550 controller)
- Battery Rack and Cables
- Oil Drain and Coolant Drain w/Hose Barb
- Oil Drain Extension (with narrow skid and enclosure models only)
- Operation and Installation Literature
- Radiator Drain Extension (with enclosure only)

## Available Options

### Approvals and Listings

- CSA Approval
- IBC Seismic Certification
- UL2200 Listing

### Enclosed Unit

- Sound Enclosure (with enclosed critical silencer)
- Weather Enclosure (with enclosed critical silencer)
- Weather Housing (with roof-mounted critical silencer)

### Open Unit

- Exhaust Silencer, Critical (kit: PA-324470)
- Exhaust Silencer, Hospital (kit: GM32386-KP1)
- Flexible Exhaust Connector, Stainless Steel

### Fuel System

- Auxiliary Fuel Pump
- Flexible Fuel Lines
- Fuel Pressure Gauge
- Subbase Fuel Tanks

### Controller

- Common Failure Relay
- Communication Products and PC Software (550 controller only)
- Customer Connection
- Dry Contact (isolated alarm)
- Engine Prealarm Sender (16 light controller only)
- Prime Power Switch (550 controller only)
- Remote Annunciator Panel
- Remote Audiovisual Alarm Panel
- Remote Emergency Stop
- Remote Mounting Cable
- Run Relay

### Cooling System

- Block Heater; Recommended for Ambient Temperatures Below 0°C (32°F)
- Radiator Duct Flange

### Electrical System

- Alternator Strip Heater
- Battery
- Battery Charger, Equalize/Float Type
- Battery Heater
- Line Circuit Breaker (NEMA type 1 enclosure)
- Line Circuit Breaker with Shunt Trip (NEMA type 1 enclosure)
- Safeguard Breaker (not available with 550 controller)

### Paralleling System

- Reactive Droop Compensator
- Remote Speed Adjust Control/Electronic Governor
- Voltage Adjust Control
- Voltage Regulator Relocation

### Miscellaneous

- Air Cleaner, Heavy Duty
- Air Cleaner Restriction Indicator
- Closed Crankcase Vent
- Engine Fluids (oil and coolant) Added
- Rated Power Factor Testing
- Rodent Guards
- Skid End Caps

### Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

### Warranty

- 2-Year Basic
- 2-Year Prime
- 5-Year Basic
- 5-Year Comprehensive
- 10-Year Major Components

### Other Options

- \_\_\_\_\_
- \_\_\_\_\_

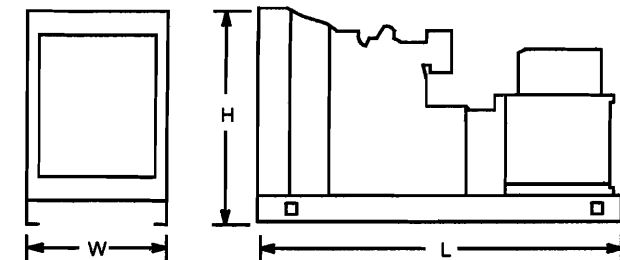
## Dimensions and Weights

Overall Size, L x W x H, mm (in.):

Wide Skid: 2300 x 1040 x 1133 (90.55 x 40.94 x 44.61)

Narrow Skid: 1998 x 780 x 1067 (78.66 x 30.71 x 42.01)

Weight (radiator model), wet, kg (lb.): 892 (1966)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

## DISTRIBUTED BY:

 **Gowen**  
Power Systems

400 COMMERCIAL ST.  
PORTLAND, ME 04101  
207.773.1781 • 800.564.8936



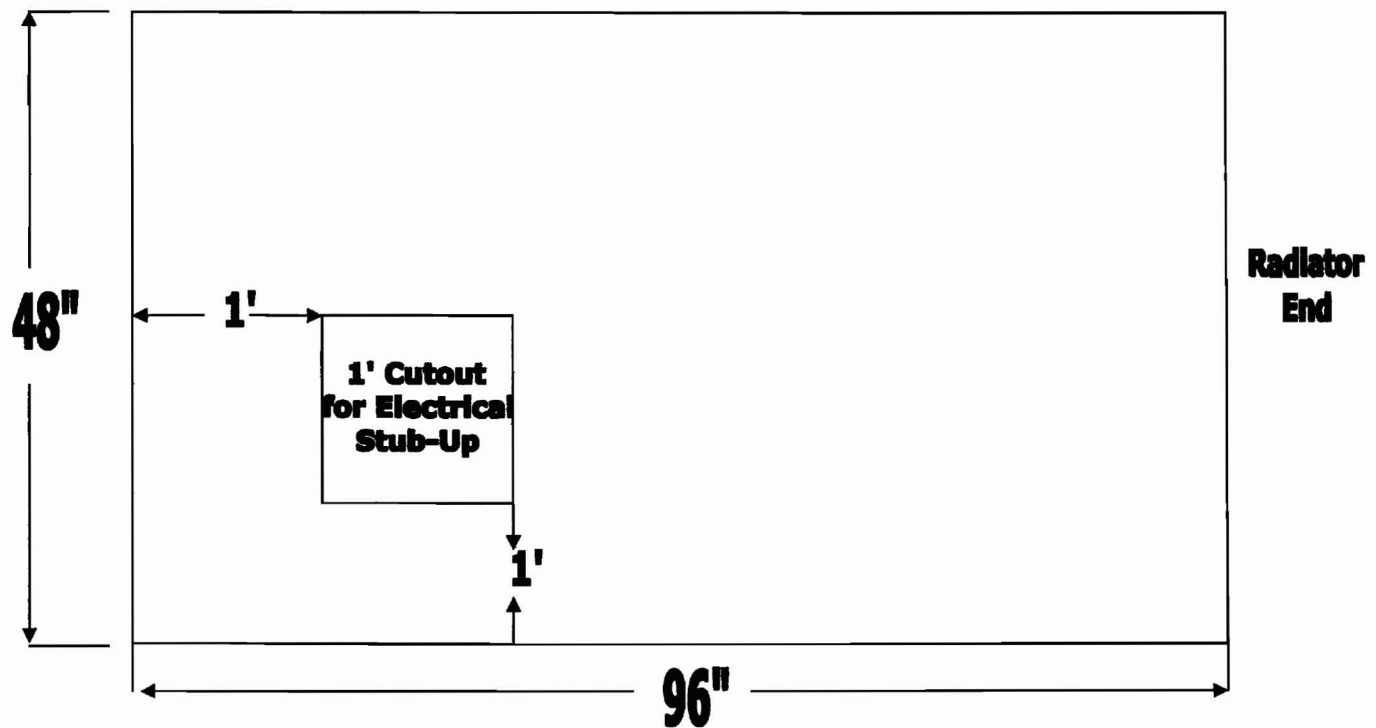
**Gowen**  
Power Systems

### Kohler 60REZG Pad Design

Delivered to

400 Presumpscot St, Portland

Unit Dimensions:  
86.6" Overall Length  
40.5" Overall Width



Minimum Thickness: 4" Thick

-- Drawing NOT to Scale --



# Application for Exemption from Site Plan Review

Portland, Maine

Department of Planning and Urban Development, Planning Division and Planning Board

PROJECT NAME: MECHANICAL SERVICES, INC.

PROJECT ADDRESS: 400 PRESUMPSCOT ST.

PROJECT DESCRIPTION: (Please Attach Sketch/Plan of Proposal/Development)

INSTALLATION OF AN EMERGENCY GENERATOR.

CHART/BLOCK/LOT: 422-B-015-001

### CONTACT INFORMATION:

#### OWNER/APPLICANT

Name: CHRIS GREEN  
Address: 400 PRESUMPSCOT ST.  
PORTLAND, ME  
Zip Code: 04103  
Work #: (207) 774-1531  
Cell #: (207) 831-2365  
Fax #: (207) 553-2865  
Home #: (207) 831-2365  
E-mail: cgreen@mechanicalservices.com

#### CONSULTANT/AGENT

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Work #: \_\_\_\_\_  
Cell #: \_\_\_\_\_  
Fax #: \_\_\_\_\_  
Home #: \_\_\_\_\_  
E-mail: \_\_\_\_\_

RECEIVED

DEC 23 2009

Dept. of Building Inspections  
City of Portland Maine

#### Criteria for Exemptions:

(See Section 14-523 (4) on page 2 of this application)

	Applicant's Assessment Y(yes), N(no), N/A	Planning Division Use Only
a) Is the proposal within existing structures?	<u>NO</u>	<u>NO</u>
b) Are there any new buildings, additions, or demolitions?	<u>NO</u>	<u>NO</u>
c) Is the footprint increase less than 500 sq. ft.?	<u>NO</u>	<u>YES</u>
d) Are there any new curb cuts, driveways or parking areas?	<u>NO</u>	<u>NO</u>
e) Are the curbs and sidewalks in sound condition?	<u>YES</u>	<u>YES</u>
f) Do the curbs and sidewalks comply with ADA?	<u>YES</u>	<u>N/A</u>
g) Is there any additional parking?	<u>NO</u>	<u>N/A</u>
h) Is there an increase in traffic?	<u>NO</u>	<u>N/A</u>
i) Are there any known stormwater problems?	<u>NO</u>	<u>NO</u>
j) Does sufficient property screening exist?	<u>YES</u>	<u>NO</u>
k) Are there adequate utilities?	<u>YES</u>	<u>YES</u>

#### Planning Division Use Only

Exemption Granted  Partial Exemption  Exemption Denied

w/ conditions of approvals.

Please see attached ~~the~~ conditions of approvals.

Planner's Signature \_\_\_\_\_

Date 12.21.09

**PROVISION OF PORTLAND CITY CODE  
14-523 (SITE PLAN ORDINANCE)  
RE: EXEMPTIONS FROM SITE PLAN REVIEW**

**Sec. 14-523. Approval required.**

No person shall undertake any development without obtaining approval therefore under this article.

- (4) The Planning authority shall exempt from review under all standards in this article developments that meet all of the following requirements:
- a. The proposed development will be located within existing structures, and there will be no new buildings, demolitions, or building additions other than those permitted by subsection b of this section;
  - b. Any building addition shall have a new building footprint expansion of less than five hundred (500) square feet;
  - c. The proposed site plan does not add any new curb cuts, driveways, or parking areas; the existing site has no more than one (1) curb cut and will not disrupt the circulation flows and parking on-site; and there will be no drive-through services provided;
  - d. The curbs and sidewalks adjacent to the lot are complete and in sound condition, as determined by the public works authority, with granite curb with at least four (4) inch reveal, and sidewalks are in good repair with uniform material and level surface and meet accessibility requirements of the Americans with Disabilities Act;
  - e. The use does not require additional or reduce existing parking, either on or off the site, and the project does not significantly increase traffic generation;
  - f. There are no known stormwater impacts from the proposed use or any existing deficient conditions of stormwater management on the site;
  - g. There are no evident deficiencies in existing screening from adjoining properties; and
  - h. Existing utility connections are adequate to serve the proposed development and there will be no disturbance to or improvements within the public right-of-way.

A developer claiming exemption under this subsection shall submit a written request for exemption stating that the proposed meets all of the provisions in standards a-h of this subsection, including an itemized statement by a qualified professional. Upon receipt of such a request, the planning authority will visit the site to verify that the exemption is applicable due to compliance with the standards. The planning authority, after consultation with the public works authority, shall render a written decision within twenty (20) working days after receipt of a written request for exemption that contains all the information required by this subsection. If a full exemption is granted, the application shall be approved without further review under this article, and no performance guarantee shall be required. The planning authority may require full site plan review of a project that meets the criteria of this subsection if it determined that there is a substantial public interest in the project.

In the event that the planning authority determines that standards a and b of this subsection and at least four (4) of the remaining standards have been met, the planning authority shall review the site plan under the review standards in section 14-526 that are affected by the standards in this subsection that have not been met. An application that receives review by the planning board shall receive a complete review under the standards of section 14-526. The planning authority shall notify an applicant in writing that full or partial site plan review is required, the reasons for the decision, and the information that will be required for site plan review.

**IMPORTANT NOTICE TO APPLICANT**

**An Exemption from site plan review does not exempt this proposal from other approvals or permits, nor is it an authorization for construction. You should first check with the Building Inspections Office, Room 315, City Hall (874-8703), to determine what other City permits, such as a building permit, will be required.**



**Planning Shukria Wiar**

December 21, 2009

Approved with the following conditions of approval:

1. The generator shall have a noise suppression mechanism installed.
2. The generator shall only be tested on weekdays (Monday through Friday) between 12:00 PM and 4:00 PM.
3. The generator shall be fully enclosed by arborvitaes.
4. The applicant must obtain all applicable building permits.



# General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>400 PRESUMPSCOT ST. PORTLAND.</u>		
Total Square Footage of Proposed Structure/Area <u>32</u>	Square Footage of Lot <u>.507 ACRES</u>	Number of Stories <u>N/A</u>
Tax Assessor's Chart, Block & Lot Chart#      Block#      Lot# <u>422-B-015-001</u> <u>422-B-15</u> <u>PLEASE SEE ATTACHED</u>	Applicant <u>must</u> be owner, Lessee or Buyer Name <u>CHRISTOPHER GREEN</u> Address <u>400 PRESUMPSCOT ST.</u> City, State & Zip <u>PORTLAND, ME 04103</u>	Telephone: <u>(207) 774-1531</u> <u>(207) 831-2365</u>
Lessee/DBA (If Applicable)	Owner (if different from Applicant) Name Address City, State & Zip	Cost Of Work: \$ <u>25,000</u> C of O Fee: \$ _____ Total Fee: \$ <u>270</u>
Current legal use (i.e. single family) <u>Commercial</u> Number of Residential Units <u>N/A</u> If vacant, what was the previous use? _____ Proposed Specific use: _____ Is property part of a subdivision? <u>NO</u> If yes, please name _____ Project description: <u>INSTALL AN EMERGENCY GENERATOR. ONLY TO BE USED DURING POWER OUTAGES. UNIT WILL HAVE AN CRITICAL EXHAUST SILENCER</u>		
Contractor's name: <u>MECHANICAL SERVICES INC.</u> Address: <u>400 PRESUMPSCOT ST.</u> City, State & Zip <u>PORTLAND, ME 04103</u> Telephone: <u>(207) 774 1531</u> Who should we contact when the permit is ready: <u>CHRIS GREEN</u> Telephone: <u>(207) 831-2365</u> Mailing address: <u>400 PRESUMPSCOT ST. PORTLAND, ME 04103</u>		

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at [www.portlandmaine.gov](http://www.portlandmaine.gov) or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature:

Chris Green

Date:

12-2-09

This is not a permit; you may not commence ANY work until the permit is issue

RECEIVED  
DEC - 3 2009  
Department of Planning & Inspections  
City of Portland, Maine



**MAINE CONTROLS**  
**MECHANICAL SERVICES, INC.**  
mechanicalservices.com

400 PRESUMPSCOT STREET  
PORTLAND, ME 04103-5292

TEL (207) 774-0220  
FAX (207) 774-3837

72 FREEDOM PARKWAY  
HERMON, ME 04401-5788

TEL (207) 848-5544  
FAX (207) 848-5562

76 CENTER ROAD  
EASTON, ME 04740-0377

TEL (207) 488-6189  
FAX (207) 488-6023

December 2, 2009

Mechanical Services, Inc., details for emergency generator.

Owner: Christopher Green.  
Mechanical Services, Inc.  
400 Presumpscot St.  
Portland, Maine 04103.

Telephone number (207) 774 1531. Cellular phone (207) 831 2365.

We would like to install a Kohler emergency generator for our building located at 400 Presumpscot Street. The generator specifications are attached for your review.

The generator would only be used during a power outage. We have purchased the generator with a Critical Exhaust Silencer. The expected sound level would be 80 dba at 23 feet.

The generator will sit on a concrete pad custom made by Swan's Wilbert Vault Co. The pad is 4' wide, 8' long and 4" thick. The pad will sit on a 6 inch to 8 inch gravel base.

We have included a site plan showing where we would like to set the new generator. This is adjacent to the electrical entrance for our building.

Our account number is 42818. CBL 422-B-015-001. Presumpscot St 402-408 22100SF.

Seabee Electric located at 84 Pleasant Hill Road, Scarborough, Maine, will be the electrical sub-contractor for the project. Their telephone number is (207) 883-5448. Contact name Bill Johnson.

The cost of the entire project is approximately \$25,000.00 including all material and labor.

The generator will be set 3' from our building. The generator will be approximately 20' from the adjoining property line.

Swan's Wilbert Vault Co.

674 Bridgton Road  
Westbrook, ME 04092

Date W.O. No.

11/12/2009 2404

Work Order

Service Date 11/12/2009

Name / Address

Delivery Details

Mechanical Services  
400 Presumscot St.  
Portland, Maine 04103  
Contractor Price

Customer Phone

774 1531

P.O. No.

S58535

Project

Item	Description	Ordered	U/M
CUSTOM	Custom made product 3' x 6' x 4"	1	
CUSTOM	Custom made product 4' x 8 x 4" with cutout (see drawing)	1	
DEL	Delivery (if both delivered at the same time and in a 3-5 day window)	1	

cgreen@mechanicalservices.com

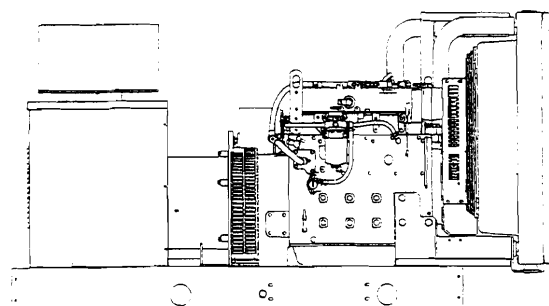
Sales Tax





### Ratings Range

		60 Hz
Standby:	kW	49-60
	kVA	49-75
Prime:	kW	45-54
	kVA	45-68



### Generator Set Ratings

Alternator	Voltage	Ph	Hz	130°C Rise Standby Rating		105°C Rise Prime Rating	
				kW/kVA	Amps	kW/kVA	Amps
4P8	120/208	3	60	60/75	208	54/68	187
	127/220	3	60	60/75	197	54/68	177
	120/240	3	60	60/75	180	54/68	162
	120/240	1	60	49/49	204	45/45	188
	139/240	3	60	60/75	180	54/68	162
	220/380	3	60	55/69	104	50/63	95
	277/480	3	60	60/75	90	54/68	81
	347/600	3	60	50/63	60	45/56	54
4P10	120/208	3	60	60/75	208	54/68	187
	127/220	3	60	60/75	197	54/68	177
	120/240	3	60	60/75	180	54/68	162
	120/240	1	60	54/54	225	50/50	208
	139/240	3	60	60/75	180	54/68	162
	220/380	3	60	60/75	114	54/68	103
	277/480	3	60	60/75	90	54/68	81
4V7	120/240	1	60	57/57	238	51/51	213

**RATINGS:** All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. **Standby Ratings:** Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. **Prime Power Ratings:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. For limited running time and base load ratings, consult the factory. Obtain the technical information bulletin (T1B-101) on ratings guidelines for the complete ratings definitions. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. **GENERAL GUIDELINES FOR DERATION:** **Altitude:** Derate 0.5% per 100 m (328 ft.) elevation above 2300 m (7546 ft.). **Temperature:** Derate 1.0% per 10°C (18°F) temperature above 25°C (77°F).

### Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- The generator set complies with ISO 8528-5, Class G2, requirements for transient performance in all generator set configurations. Select the Decision-Maker<sup>®</sup> 550 controller for improved voltage regulation and ISO 8528-5, Class G3, compliance.
- The 60 Hz generator set engine is certified by the Environmental Protection Agency (EPA) to conform to Tier 3 nonroad emissions regulations.
- A one-year limited warranty covers all systems and components. Two-, five-, and ten-year extended warranties are also available.
- Alternator features:
  - The unique Fast-Response™ II excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
  - Controllers are available for all applications. See controller features inside.
  - The low coolant level shutdown prevents overheating (standard on radiator models only).
  - Integral vibration isolation eliminates the need for under-unit vibration spring isolators.

## Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet
Leads: quantity, type	12, Reconnectable
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	
Permanent magnet (PM) alternator	±2% Average
550 controller (with 0.5% drift due to temperature variation)	3-Phase Sensing, ±0.25%
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V 4P8 (12 lead)	212
480 V 4P10 (12 lead)	250
240 V 4V7 (4 lead)	215

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Vacuum-impregnated windings with fungus-resistant epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.
- Fast-Response™ II brushless alternator with brushless exciter for excellent load response.

## Application Data

### Engine

Engine Specifications	
Manufacturer	John Deere
Engine model	5030HF285G
Engine type	4-Cycle, Turbocharged
Cylinder arrangement	5 Inline
Displacement, L (cu. in.)	3.0 (186)
Bore and stroke, mm (in.)	86 x 105 (3.39 x 4.13)
Compression ratio	18.2:1
Piston speed, m/min. (ft./min.)	375 (1230)
Main bearings: quantity, type	6, Replaceable Insert
Rated rpm	1800
Max. power at rated rpm, kWm (BHP)	72 (97)
Cylinder head material	Cast Iron
Crankshaft material	Ductile Iron
Valve material:	
Intake	Chromium-Silicon Steel
Exhaust	Stainless Steel
Governor: type, make/model	JDEC Electronic, Level 18, EUP
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±0.25%
Frequency	Field-Convertible
Air cleaner type, all models	Dry

### Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust flow at rated kW, m <sup>3</sup> /min. (cfm)	13.8 (488)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	524 (976)
Maximum allowable back pressure, kPa (in. Hg)	7.5 (2.2)
Exhaust outlet size at engine hookup, mm (in.)	64.0 (2.5)

### Engine Electrical

Engine Electrical System		
Battery charging alternator:		
Ground (negative/positive)		Negative
Volts (DC)		12
Ampere rating		70
Starter motor rated voltage (DC)		12
Battery, recommended cold cranking amps (CCA):		
Quantity, CCA rating		One, 640
Battery voltage (DC)		12

### Fuel

Fuel System		
Fuel supply line, min. ID, mm (in.)		11.0 (0.44)
Fuel return line, min. ID, mm (in.)		6.0 (0.25)
Max. lift, engine-driven fuel pump, m (ft.)		3.0 (10.0)
Max. fuel flow, Lph (gph)		82 (21.7)
Fuel prime pump		Manual
Fuel filter		
Secondary		5 Microns @ 98% Efficiency
Water Separator		Yes
Recommended fuel		#2 Diesel

### Lubrication

Lubricating System		
Type		Full Pressure
Oil pan capacity, L (qt.)		10.4 (11.0)
Oil pan capacity with filter, L (qt.)		11.3 (11.9)
Oil filter: quantity, type		1, Cartridge
Oil cooler		Water-Cooled

## Application Data

### Cooling

Radiator System	
Ambient temperature, °C (°F)*	50 (122)
Engine jacket water capacity, L (gal.)	3.4 (0.9)
Radiator system capacity, including engine, L (gal.)	11.0 (2.9)
Engine jacket water flow, Lpm (gpm)	98 (26)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	45.9 (2612)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	13.0 (740)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	597 (23.5)
Fan, kWm (HP)	4.1 (5.5)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H <sub>2</sub> O)	0.125 (0.5)

\* Enclosure reduces ambient temperature capability by 5°C (9°F).

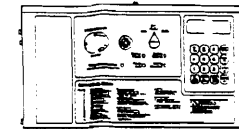
### Operation Requirements

Air Requirements	
Radiator-cooled cooling air, m <sup>3</sup> /min. (scfm)‡	96 (3400)
Combustion air, m <sup>3</sup> /min. (cfm)	5.3 (187)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	15.5 (880)
Alternator, kW (Btu/min.)	8.9 (505)

‡ Air density = 1.20 kg/m<sup>3</sup> (0.075 lbm/ft<sup>3</sup>)

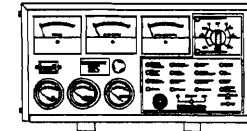
Fuel Consumption		
Diesel, Lph (gph) at % load	Standby Rating	
100%	19.1	(5.0)
75%	14.4	(3.8)
50%	10.1	(2.7)
25%	6.0	(1.6)
Diesel, Lph (gph) at % load	Prime Rating	
100%	17.5	(4.6)
75%	13.1	(3.5)
50%	9.2	(2.4)
25%	5.8	(1.5)

## Controllers



### Decision-Maker® 550 Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Programmable microprocessor logic and digital display features. Alternator safeguard circuit protection. 12- or 24-volt engine electrical system capability. Remote start, remote annunciation, and remote communication options. Refer to G6-46 for additional controller features and accessories.



### Decision-Maker® 3+, 16-Light Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Microprocessor logic, AC meters, and engine gauge features. 12- or 24-volt engine electrical system capability. Remote start, prime power, and remote annunciation options. Refer to G6-30 for additional controller features and accessories.



## Additional Standard Features

- Alternator Protection (standard with 550 controller)
- Battery Rack and Cables
- Oil Drain and Coolant Drain w/Hose Barb
- Oil Drain Extension (with narrow skid and enclosure models only)
- Operation and Installation Literature
- Radiator Drain Extension (with enclosure only)

## Available Options

### Approvals and Listings

- CSA Approval
- IBC Seismic Certification
- UL2200 Listing

### Enclosed Unit

- Sound Enclosure (with enclosed critical silencer)
- Weather Enclosure (with enclosed critical silencer)
- Weather Housing (with roof-mounted critical silencer)

### Open Unit

- Exhaust Silencer, Critical (kit: PA-324470)
- Exhaust Silencer, Hospital (kit: GM32386-KP1)
- Flexible Exhaust Connector, Stainless Steel

### Fuel System

- Auxiliary Fuel Pump
- Flexible Fuel Lines
- Fuel Pressure Gauge
- Subbase Fuel Tanks

### Controller

- Common Failure Relay
- Communication Products and PC Software (550 controller only)
- Customer Connection
- Dry Contact (isolated alarm)
- Engine Prealarm Sender (16 light controller only)
- Prime Power Switch (550 controller only)
- Remote Annunciator Panel
- Remote Audiovisual Alarm Panel
- Remote Emergency Stop
- Remote Mounting Cable
- Run Relay

### Cooling System

- Block Heater; Recommended for Ambient Temperatures Below 0°C (32°F)
- Radiator Duct Flange

### Electrical System

- Alternator Strip Heater
- Battery
- Battery Charger, Equalize/Float Type
- Battery Heater
- Line Circuit Breaker (NEMA type 1 enclosure)
- Line Circuit Breaker with Shunt Trip (NEMA type 1 enclosure)
- Safeguard Breaker (not available with 550 controller)

### Paralleling System

- Reactive Droop Compensator
- Remote Speed Adjust Control/Electronic Governor
- Voltage Adjust Control
- Voltage Regulator Relocation

### Miscellaneous

- Air Cleaner, Heavy Duty
- Air Cleaner Restriction Indicator
- Closed Crankcase Vent
- Engine Fluids (oil and coolant) Added
- Rated Power Factor Testing
- Rodent Guards
- Skid End Caps

### Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

### Warranty

- 2-Year Basic
- 2-Year Prime
- 5-Year Basic
- 5-Year Comprehensive
- 10-Year Major Components

### Other Options

- \_\_\_\_\_
- \_\_\_\_\_

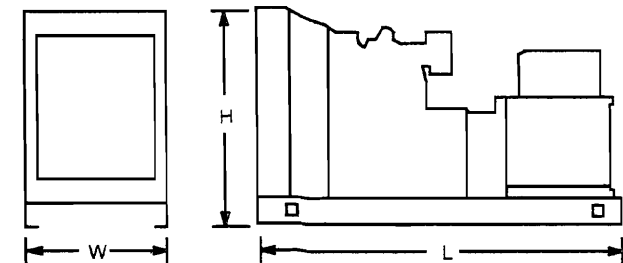
## Dimensions and Weights

Overall Size, L x W x H, mm (in.):

Wide Skid: 2300 x 1040 x 1133 (90.55 x 40.94 x 44.61)

Narrow Skid: 1998 x 780 x 1067 (78.66 x 30.71 x 42.01)

Weight (radiator model), wet, kg (lb.): 892 (1966)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

### DISTRIBUTED BY:

 **Gowen**  
Power Systems

400 COMMERCIAL ST.  
PORTLAND, ME 04101  
207.773.1751 • 800.564.6936

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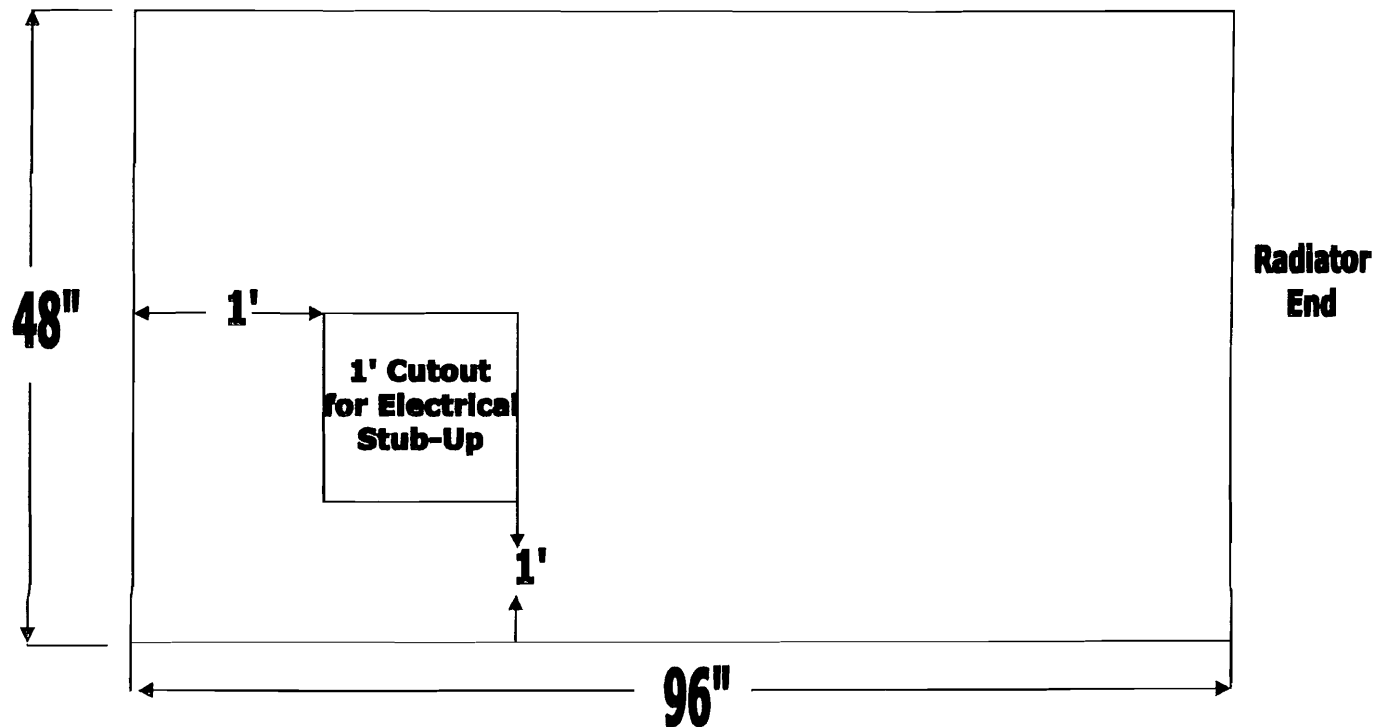
G5-317 (60REOZJC) 9/09c



## Kohler 60REZG Pad Design

Unit Dimensions:  
86.6" Overall Length  
40.5" Overall Width

*Delivered to  
400 PRESUMPSCOOT ST, PORTLAND*



Minimum Thickness: 4" Thick

-- Drawing NOT to Scale --

This page contains a detailed description of the Parcel ID you selected. Press the **New Search** button at the bottom of the screen to submit a new query.

### Current Owner Information:

Home

Assessors

Professions

Legal Services

Map

Tax Relief

Tax Roll

Q & A

Assessor's Office

browse city services a-z

Assessor's Office

browse facts and links a-z

Assessor's Office



<b>CBL</b>	418A A004001
<b>Land Use Type</b>	SINGLE FAMILY
<b>Property Location</b>	410 PRESUMPCOT ST
<b>Owner Information</b>	BROWN MARGARET B 410 PRESUMPCOT ST PORTLAND ME 04103
<b>Book and Page</b>	
<b>Legal Description</b>	418A-A-4 PRESUMPCOT ST 410-412
	16981 SF
<b>Acres</b>	0.39

### Current Assessed Valuation:

<b>TAX ACCT NO.</b>	42754	<b>OWNER OF RECORD AS OF APRIL 2009</b>
		BROWN MARGARET B
<b>LAND VALUE</b>	\$67,600.00	410 PRESUMPCOT ST
<b>BUILDING VALUE</b>	\$67,100.00	PORTLAND ME 04103
<b>HOMESTEAD EXEMPTION</b>	(\$12,350.00)	
<b>NET TAXABLE - REAL ESTATE</b>	\$122,350.00	
<b>TAX AMOUNT</b>	\$2,170.50	

Any information concerning tax payments should be directed to the Treasury office at 874-8490 or e-mailed.

### Building Information:

Card 1 of 1

<b>Year Built</b>	1947
<b>Style/Structure Type</b>	OLD STYLE
<b># Stories</b>	1.5
<b>Bedrooms</b>	2
<b>Full Baths</b>	1
<b>Total Rooms</b>	4
<b>Attic</b>	NONE
<b>Basement</b>	CRAWL
<b>Square Feet</b>	962

[View Sketch](#)

[View Map](#)



## ***Outbuildings/Yard Improvements:***

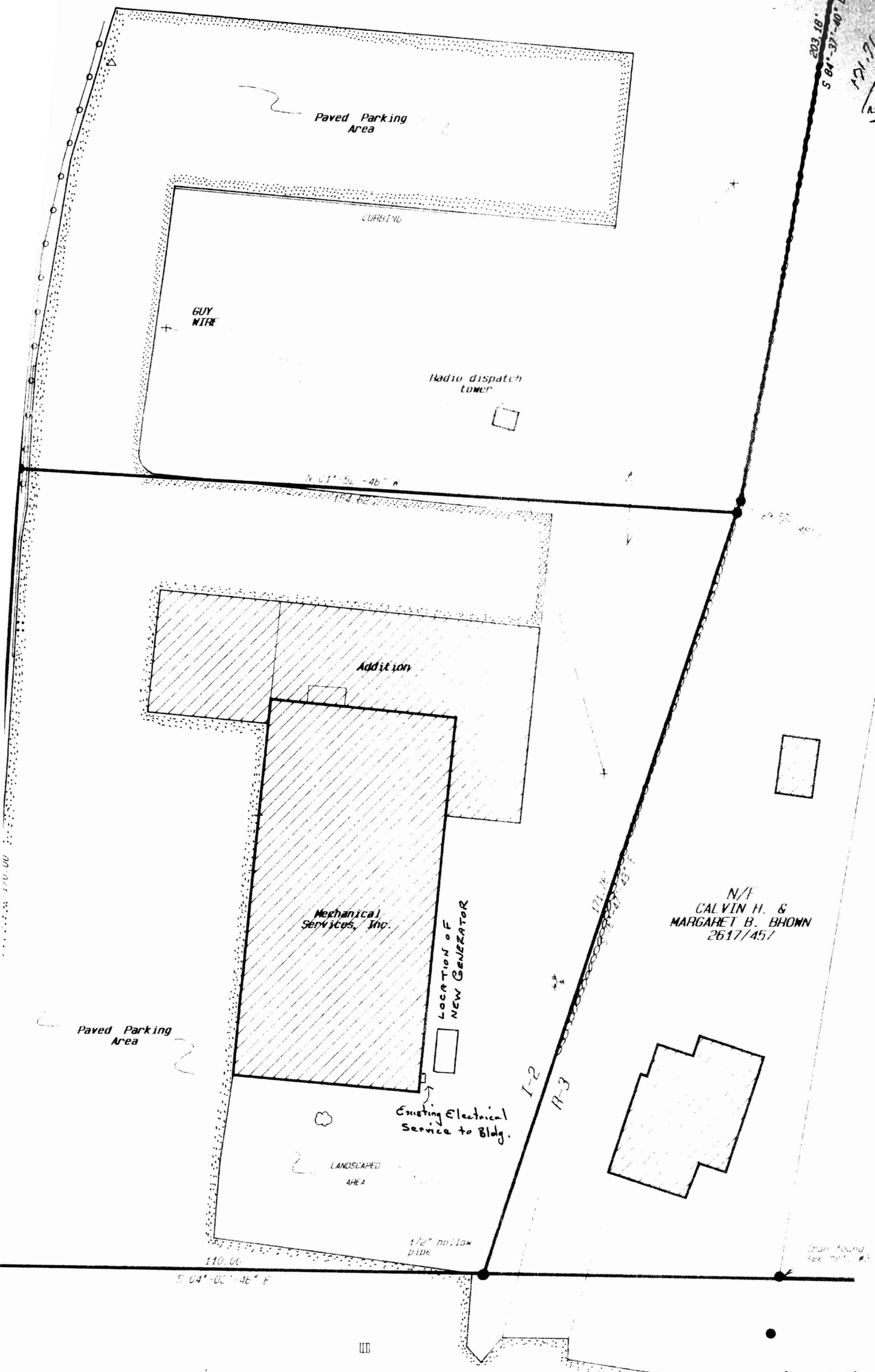
### **Card 1**

<b>Year Built</b>	1993
<b>Structure</b>	UTILITY BUILDING - FRAME
<b>Size</b>	8X10
<b>Units</b>	1
<b>Grade</b>	C
<b>Condition</b>	A

**New Search!**

220.81

203.18'  
S 84°-37'-40" E  
121.76  
384.94

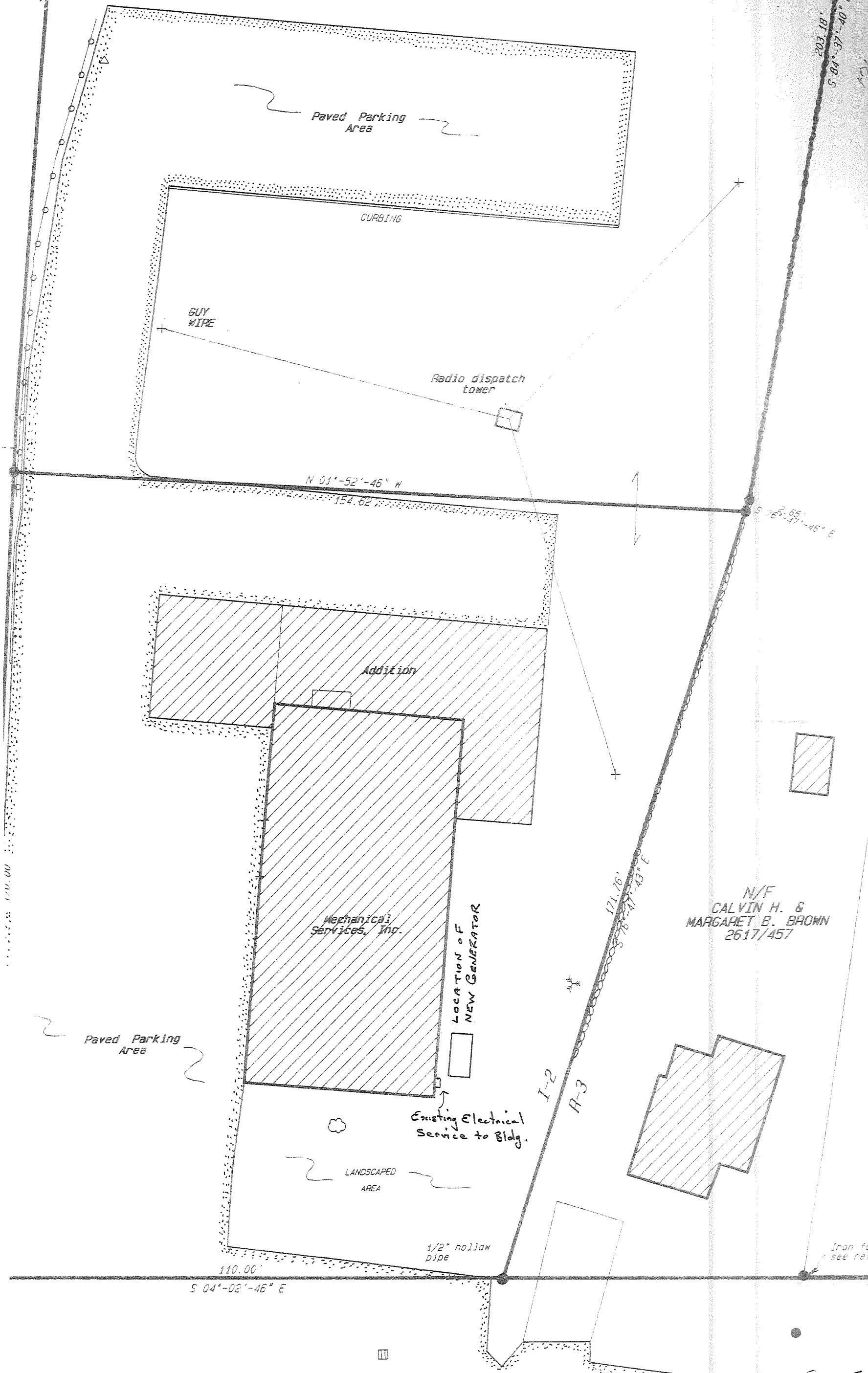


ESUMPSCOT STREET

SCALE 1 INCH = 20 FT

S 88°-07' 220.11'  
110.00'

171.76  
384.94



N/F  
CALVIN H. &  
MARGARET B. BROWN  
2617/457

SCALE 1 INCH = 20 FEET

ESUMPSCOT STREET