

A HERITAGE OF GOOD LIVING

COUNCIL COMMUNICATION:

TO: Mayor Garrett and City Council Members
FR: Sheryl L. Mitchell, City Administrator
DA: January 28, 2019

RE: **ZBA Public Hearing and Review E 18471 Roseland**

The applicant, Mr. Les Stansbery, at 18471 Roseland Blvd., is requesting approval to:

- (1) place a generator within a side yard, and
- (2) to place an accessory structure within a side yard setback.

The City Planner provided a review of the application that is included in the packet. It is noted that the existing home has a limited side yard, totalling approximately seven (7) feet. The side yard requirement is fifteen (15) feet. The Planner suggests the applicant obtain a partial survey to confirm that the proposed location of the generator and the arborvitae/bush screening are entirely within their property lines.

The neighbor at 28785 Somerset Place has provided a letter supporting the placement of the generator.

Suggested Motion:

To APPROVE / APPROVE WITH CONDITIONS / DENY the Zoning Variance Request for 18471 Roseland Blvd. to place a permanent power generator in the side yard (Section 4.12.1.F) and to permit a three (3) foot accessory structure setback with a total of five (5) feet on both sides (Section 3.1.2.D).

Motion by _____, Seconded by _____,

**CITY OF LATHRUP VILLAGE
ZONING BOARD OF APPEALS**

**NOTICE OF PUBLIC HEARING
(Zoning Variance)**

RE: 18471 Roseland Blvd
Lathrup Village, Michigan

Appeal No. _____-19

TO PROPERTY OWNERS OR PARTIES OF INTEREST:

The Zoning Board of Appeals for the City of Lathrup Village will hold a Public Hearing on an appeal filed by Les Stansbery and Valencia Morris at 18471 Roseland Blvd, Lathrup Village, Michigan 48076 to obtain variances from the Zoning Ordinance, Section 4.12.1.F and 3.1.2.D regarding installation of a generator in the side yard and within a side yard setback as follows:

1. Section 4.12.1.F requires that any permanent generators on a residential parcel be placed in the rear of the yard. The applicant is requesting the generator be placed in the side yard.
2. Section 3.1.2.D requires that a generator on a residential property have a minimum setback of 5 feet, with a total of 15 feet for both sides. The applicant is requesting a 3 foot side setback with a total of 5 feet on both sides.

Approval of the Zoning Board of Appeals is required.

PLEASE TAKE NOTICE: That a Public Hearing has been scheduled for Monday, January 28, 2019 at 7:00 p.m. in the Council Chambers (upper level) in the Municipal Building, 27400 Southfield Road, Lathrup Village, Michigan to hear and record the public hearing on this appeal. Any member of the public may express your view on this appeal in writing, by submitting your written comments to the City Clerk prior to 4:30 p.m. on the date of the hearing, or you may appear in person or authorize another person to represent you at the hearing. Written communications may be sent to the City Clerk at the address of the City Hall at 27400 Southfield Road, Lathrup Village, Michigan 48076 prior to the hearing.

Yvette Talley
City Clerk
27400 Southfield Road
Lathrup Village, Michigan 48076
(248) 557-2600, ext. 226

December 12, 2018

ZBA Review

Proposed Generator in required side yard

Address:	18471 Roseland Blvd.	Applicant:	Les Stansbery
Parcel ID:	24-14-229-001	App. Date:	11/14/2018
Zoning:	R-1	Reviewer:	Matt Wojciechowski Jill Bahm

Proposed Improvements Requiring ZBA Approval

- The applicant is requesting to place a generator within a side yard
- The applicant is requesting to place an accessory structure within a side yard setback

General Site Information:

1. **Summary.** The subject property is located the southeast corner of Roseland Blvd. and Somerset Place and is zoned R-1 Single-family Residential. The parcel appears to be approximately .32 acres and contains a single-family home. The applicant is requesting a deviation from the zoning standards to install a generator in the side yard, within the required setback. The information submitted by the applicant does not clearly show the placement nor the setback dimensions.
2. **Variiances Requested.** Section 4.12.1.F. requires that any permanent power generators on a residential parcel be placed in the rear of the yard. **The applicant is requesting the generator be placed in the side yard of their property, a deviation from the residential zoning standards.** This is due to the location of the existing electric meter on site and limited rear yard space. **The applicant is also requesting to place the generator within three feet (3') of the side property line, which does not meet the setback standards for generators in the R-1 district.** Section 3.1.2.D. requires that a generator (accessory structure) on a residential parcel shall have a minimum setback of five feet (5'), with a total of 15'; for both sides. **The applicants request is a three-foot (3') side setback with a total of five feet (5') on both sides.**

3. Required Standards

Development Standard	Zoning Ord. Section	Standard Measured	Required	Provided	Comment
[Accessory] Structure Setback	3.1.2.D.	Side Setback	5'	~3'	Variance requested
		Side Setback total	15'	~5'	
Permanent Power Generators	4.12.1.F.	Location	Rear Yard	Side yard	

ZBA Considerations for Review

4. **Standards for Considering Variance Requests.** Section 7.7.14. provides the criteria for the ZBA to consider when considering variance requests:
- A. Because of the particular physical surroundings, shape, or topographical conditions of the specific property involved, a particular hardship will result to the applicant if the strict letter of the regulations are carried out. Mere inconveniences or increased development costs shall not be deemed hardships under the terms of this provision.
 - B. The factual circumstances upon which an application for a deviation is based are unique to the property for which the deviation is sought, and are not applicable to the city generally, or to other property within the same zoning classification.
 - C. Any alleged practical difficulty or unnecessary hardship caused by this ordinance has not been created by any persons presently or previously having an interest in the property.
 - D. The proposed deviation will not adversely affect the purpose or objectives of this ordinance, nor impair the adequate supply of light and air to adjacent property, nor increase the hazard from fire, flood, and other dangers of said property, nor diminish the marketable value of adjacent lands and buildings, nor increase the congestion in public streets.
 - E. The proposed deviation will not otherwise impair the public health, safety, comfort, and general welfare.
 - F. The benefit to the applicant will be real and substantial and any detriment to the neighboring property owners and occupants or the community at large is not substantial or is illusory. Benefits and detriments shall be determined in relation to the factors which impair the value and use of properties as related in D & E, above.
 - G. The applicant is both willing and able to provide additional amenities beyond those minimally required by this ordinance and/or restrict the use of the property beyond those limitations placed on the property by this ordinance so that the fair market value of neighboring properties will be enhanced beyond the values which would accrue to them if the property were developed and used in strict conformity with the ordinance.
 - H. The same or a substantially similar request shall not have been presented to the council in the form of a petition for a zoning amendment and been expressly denied and rejected after a public hearing.
 - I. Any special criteria listed for specific deviations in Sections 3.2.2, 4.1.4, and 5.13.15. This does not appear to apply for this situation.
5. **Additional Considerations.** During our review of the request, we noted that the applicant's lot is currently non-conforming, as the existing home does not meet the total side setback requirement of 15'. The east and west setbacks for the home appear to be five and two feet, respectively, totaling approximately seven feet. **Due to the limited side yard space and lack of dimensioned information, we advise the applicant to complete a partial survey to confirm that the proposed location of the generator is entirely within their property lines. The applicant also notes that the generator will**

be screened with arborvitae and bushes, but it is unclear whether this screening is on the applicant property.

We are available to answer questions

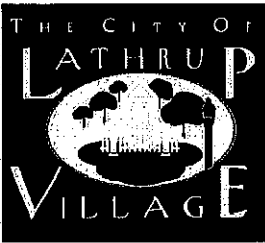
Respectfully,
Giffels Webster



Jill Bahm, AICP
Principal Planner



Matt Wojciechowski
Staff Planner



City of Lathrup Village
 Zoning Board of Appeals
 27400 Southfield Road
 Lathrup Village, MI 48076

Phone: (248) 557-2600

Fax: (248) 557-2602

RECEIVED
 JAN 23 2018
 CITY CLERK'S OFFICE

Office Use Only

Date Submitted: _____

ZBA Review #: _____

Fee Paid: _____

Hearing Date: _____

A HERITAGE OF GOOD LIVING

Application for Zoning Appeal

Subject Property Address: SAN QUINTEN ALLEY
 Subject Property Parcel Number: ? ROAD ENDS
 Property Zoning: STREET CLOSURE

Applicant Information

Name: DOUGLAS GRECH
 Address: 27680 LATHRUP BLVD. State: MI Zip Code: 48076
 Phone Number: 248-905-3353 Fax: 248-905-3892
 Email Address: DOUGLASS DOUGLASS @ GMAIL . COM
 Interest in Property: OWNING TO LANDSCAPE AND BEAUTIFY

Property Owner Information

Name: CITY OF LATHRUP VILLAGE
 Address: 27400 SOUTHFIELD RD State: MI Zip Code: 48076
 Phone Number: 248-557-2600 Fax: _____
 Email Address: WWW.LATHRUPVILLAGE.ORG

Variance Information (Attach Additional Pages as Necessary)

1) Section:	Variance Description:
2) Section:	Variance Description:
3) Section:	Variance Description:

Please State the Reason for Requesting an Ordinance Variance: THIS STREET
SAN QUINTEN, ENDS AND IS MY ONLY MEANS TO ENTER
MY GARAGE. I RE SURFACED THE ROAD BECAUSE OF MASSIVE
POT HOLES. I DID SOME BARK PLANTING JUST TO MAKE IT BEAUTIFUL

Required Items

Prior to **30 Days** before next scheduled regular meeting of the Zoning Board of Appeals the applicant is required to file **10 copies** of plans containing the following items with the Clerk's Office:

- An application fee for a Zoning Appeal. \$125.00 for Residential Parcels and \$200 for all other Parcels
- Actual shape and dimensions of the lot, Drawn to Scale
- The location and dimensions of all existing structures and the location and dimensions of the proposed change (i.e. new structure of alteration of existing one).
- Existing and intended use for each building or part thereof.
- Statement of practical difficulties that prevent conformities with the Ordinance Requirements
- Description of any unique circumstances regarding the property (i.e. parcel shape, location, building, etc)

Application for Zoning Appeal

The Zoning Board of Appeals has the responsibility for making the decision to approve or deny your appeal. Information such as photographs, evidence that you have discussed your appeal with your neighbors, detailed plans, examples of the type of building, structure or the like will provide a better basis for review and understanding of your appeal. Failure to provide adequate specifics and details will result in a refusal by the City staff to accept your application and delay your appearance before the Zoning Board of Appeals.

Standards Used by the Zoning Board of Appeals for Granting Variances

The Zoning Board of Appeals will use the following standards for granting variances. The Applicant is encourage to review Article 7.0 of the Zoning Ordinance prior to appearing before the Board.

Article 7.0, Section 7.7(14) Deviations and Standards

- a) Because of the particular physical surroundings, shape, or topographical conditions of the specific property involved, a particular hardship will result to the applicant if the strict letter of the regulations are carried out. Mere
- b) The factual circumstances upon which an application for a deviation is based are unique to the property for which the deviation is sought, and are not applicable to the City generally, or to other property within the same zoning classification.
- c) Any alleged practical difficulty or unnecessary hardship caused by this ordinance has not been created by an persons presently or previously having an interest in the property.
- d) The proposed deviation will not adversely affect the purpose or objectives of this ordinance, nor impair the adequate supply of light and air to adjacent property nor diminish the marketable value of adjacent lands and buildings, nor increase the congestion in public streets.
- e) The proposed deviation will not otherwise impair the public health, safety, comfort, and general welfare.
- f) The benefit to the applicant will be real and substantial and any detriment to the neighboring property owners and occupants or the community at large is not substantial or is illusory. Benefits and detriments shall be determined in relation to the factors which impair the value and use of properties as related in (d) and (e), above.
- g) The applicant is both willing and able to provide additional amenities beyond those minimally required by this ordinance and/or restrict the use of the property beyond those limitations placed on the property by this ordinance so that the fair market value of neighboring properties will be enhanced beyond the values which would accrue to them if the property were developed and used in strict conformity with the ordinance.
- h) The same or a substantially similar request shall not have been presented to the Council in the form of a petition for a zoning amendment and been expressly denied and rejected after a public hearing.
- i) Any special criteria listed for specific deviations elsewhere in this ordinance.

Verbatim Minutes

If any party desires that a verbatim record be kept, \$200.00 shall be paid by the requesting party before the evidentiary portion of the hearing commences. The city shall refund such amount of the fee paid as exceeds the city's actual costs when the proceedings have been completed.

Owner's Affidavit

The undersigned being duly sworn, deposes and says that the foregoing statements and answers herein contained and supporting information and data are in all respects true and correct to the best of the Owner's knowledge and belief.

Signature:		Date:	
Subscribed and sworn to before me this:		Day of	
Notary Public Name:		County of:	
With Commission to expire on:			

Applicant Signature

I/We do hereby swear that the above stated information is accurate and complete.

Name:	DOUGLAS H. GRECH		
Signature:		Date:	January 21, 2019

1/11/19



R/USA

To Whom It May Concern:

Regarding the appeal filed by Les Stansbery & Valencia Morris, as their near neighbors on Somerset Place, I see no reason why they should not be granted the variance. They are good neighbors and keep their property in immaculate shape.

Thank you,

Dorothy W. Goodwin
28785 Somerset Place
Farmington Hills, MI 48076

RECEIVED
JAN 16 2018

CITY CLERKS OFFICE

FW: 18471 Roseland - Generator Install

To Ryan Sibel <ryan@oakelectric.com> • Les Stansbery <lstansbery@comcast.net>

Les and Ryan below is the update I got from the building department regarding placement

Thank you very much,

Nena Graves.

Permits & Inspections

Office 248-623-4900

Direct Fax 248-575-4134

www.oakelectric.com www.oakhep.com

From: Ken Marten [mailto:customerservice@lathrupvillage.org]

Sent: Thursday, August 2, 2018 10:06 AM

To: nen@oakelectric.com

Subject: RE: 18471 Roseland - Generator Install

Nena:

Regarding the generator install at 18471 Roseland, the inspector reviewed the map and determined that the proposed location would be a side yard. As you and I discussed, our ordinance doesn't allow for that. The homeowner would have to ask for a variance before the Zoning Board of Appeals, which requires the applicant to prove "hardship." In this case, I'd assume the odd shape of the property is the hardship.

Another factor is installing the generator three feet from the lot line. Side setbacks in R-1 require a 15-foot total minimum; it could be 5 feet on one side and 10 feet on the other. Placing a generator 3 feet off the line isn't allowed. This would require a variance as well. Again, I'd assume the shape would be the hardship.

Please email or call with additional questions.

Ken Marten, MPA

DDA Director

Assistant to the City Administrator

27400 Southfield Rd.

Lathrup Village, MI 48076

248-557-2600 x223

**18471 ROSELAND BLVD.
ACCESSORY STRUCTURE PERMIT
APPLICATION
AND
REQUEST FOR VARIANCE**

PROPERTY OWNERS:

LES STANSBERY AND VALENCIA MORRIS

LSTANSBERY@COMCAST.NET

248-229-7140

Reason for Variance:

We are planning to install a residential automatic standby generator.

Due to the odd shape of the property and the location of the electrical connection and that the proposed location would be a side yard and three feet from the lot line (see photo).

We are requesting two variances.

1. Because the ordinance does not allow for location to be a side yard
2. Because the side setbacks for R-1 requires a 15-foot total minimum

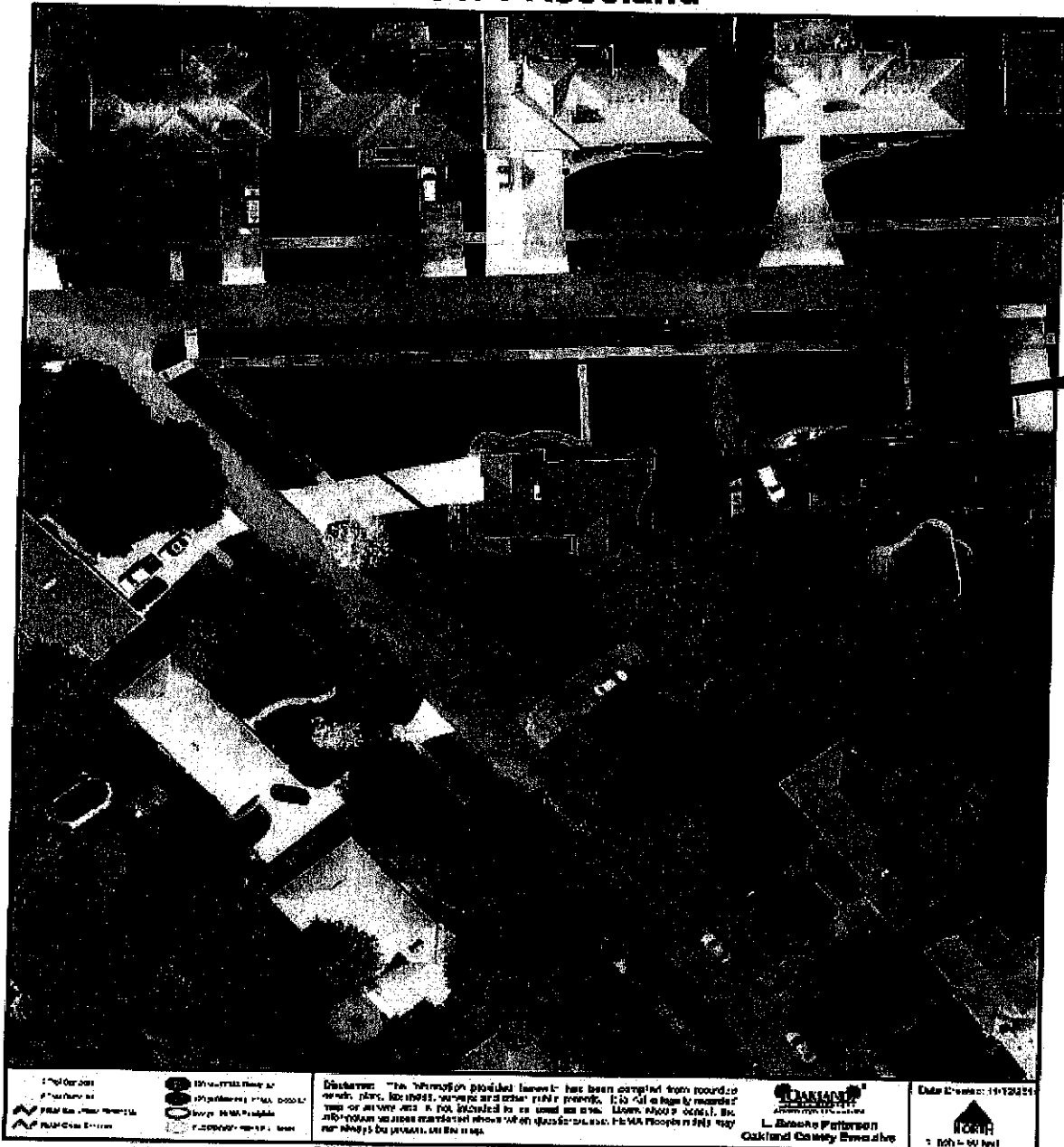
18471 Roseland Blvd II



Location:

We would like to place the generator in the spot recommended by the contractor, which would be located on the side of the property directly across from the electric meter three feet from the property line. It will be hidden behind 10-foot-tall Arborvitae on one side and 4-foot-tall Burning bush on the other side.

18471 Roseland



16/20/22 kW

GUARDIAN® SERIES Residential Standby Generators Air-Cooled Gas Engine

INCLUDES:

- True Power™ Electrical Technology
- Two Line LCD Multilingual Digital Evolution™ Controller (English/Spanish/French/Portuguese)
- Two Transfer Switch Options Available: 100 Amp, 16 Circuit Switch or 200 Amp Service Rated Smart Switch. See Page 4 for Details.
- Electronic Governor
- System Status & Maintenance Interval LED Indicators
- Sound Attenuated Enclosure
- Flexible Fuel Line Connector
- Direct-To-Dirt Composite Mounting Pad
- Natural Gas or LP Gas Operation
- 5 Year Limited Warranty
- Capability to be installed within 18" (457 mm) of a building*

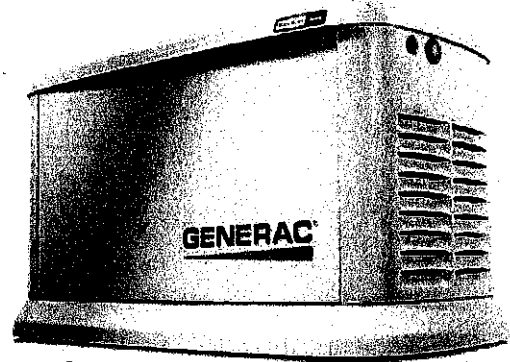
Standby Power Rating

Models G007036-0, G007037-0 (Aluminum - Bisque) - 16 kW 60 Hz

Model G007035-0 (Aluminum - Bisque) - 16 kW 60 Hz

Models G007039-0, G007038-0 (Aluminum - Bisque) - 20 kW 60 Hz

Models G007043-1, G007042-1 (Aluminum - Bisque) - 22 kW 60 Hz



Note: CUL certification only applies to unbundled units and units packaged with limited circuit switches. Units packaged with the Smart Switch are UL certified in the USA only.

*Only if located away from doors, windows and fresh air intakes, and unless otherwise directed by local codes.

FEATURES

- **INNOVATIVE ENGINE DESIGN & RIGOROUS TESTING** are at the heart of Generac's success in providing the most reliable generators possible. Generac's G-Force engine lineup offers added peace of mind and reliability for when you need it the most. The G-Force series engines are purpose built and designed to handle the rigors of extended run times in high temperatures and extreme operating conditions.
- **TRUE POWER™ ELECTRICAL TECHNOLOGY:** Superior harmonics and sine wave form produce less than 5% Total Harmonic Distortion for utility quality power. This allows confident operation of sensitive electronic equipment and micro-chip based appliances, such as variable speed HVAC systems.
- **TEST CRITERIA:**
 - ✓ **PROTOTYPE TESTED**
 - ✓ **SYSTEM TORSIONAL TESTED**
 - ✓ **NEMA MG1-22 EVALUATION**
 - ✓ **MOTOR STARTING ABILITY**
- **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION:** This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. Digital voltage regulation at ±1%.
- **SINGLE SOURCE SERVICE RESPONSE** from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- **GENERAC TRANSFER SWITCHES:** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.

THE GENERAC PROMISE



* Pull in the USA using domestic and foreign parts.

Engine

- Generac G-Force design
Maximizes engine "breathing" for increased fuel efficiency. Plateau honed cylinder walls and plasma moly rings helps the engine run cooler, reducing oil consumption resulting in longer engine life.
- "Spiny-lok" cast iron cylinder walls
Rigid construction and added durability provide long engine life.
- Electronic Ignition/spark advance
These features combine to assure smooth, quick starting every time.
- Full pressure lubrication system
Pressurized lubrication to all vital bearings means better performance, less maintenance and longer engine life. Now featuring up to a 2 year/200 hour oil change interval.
- Low oil pressure shutdown system
Shutdown protection prevents catastrophic engine damage due to low oil.
- High temperature shutdown
Prevents damage due to overheating.

Generator

- Revolving field
Allows for a smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.
- Skewed stator
Produces a smooth output waveform for compatibility with electronic equipment.
- Displaced phase excitation
Maximizes motor starting capability.
- Automatic voltage regulation
Regulates the output voltage to $\pm 1\%$ prevents damaging voltage spikes.
- UL 2200 listed
For your safety.

Transfer Switch (if applicable)

- Fully automatic
Transfers your vital electrical loads to the energized source of power.
- NEMA 3R
Can be installed inside or outside for maximum flexibility.
- Remote mounting
Mounts near your existing distribution panel for simple, low-cost installation.

Evolution™ Controls

- Auto/Manual/Off illuminated buttons
Selects the operating mode and provides easy, at-a-glance status indication in any condition.
- Two-line LCD multilingual display
Provides homeowners easily visible logs of history, maintenance and events up to 50 occurrences.
- Sealed, raised buttons
Smooth, weather-resistant user interface for programming and operations.
- Utility voltage sensing
Constantly monitors utility voltage, setpoints 65% dropout, 80% pick-up, of standard voltage.
- Generator voltage sensing
Constantly monitors generator voltage to ensure the cleanest power delivered to the home.
- Utility interrupt delay
Prevents nuisance start-ups of the engine, adjustable 2-1500 seconds from the factory default setting of 5 seconds by a qualified dealer.
- Engine warm-up
Ensures engine is ready to assume the load, setpoint approximately 5 seconds.
- Engine cool-down
Allows engine to cool prior to shutdown, setpoint approximately 1 minute.
- Programmable exercise
Operates engine to prevent oil seal drying and damage between power outages by running the generator for 5 minutes every other week. Also offers a selectable setting for weekly or monthly operation providing flexibility and potentially lower fuel costs to the owner.
- Smart battery charger
Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature. Compatible with lead acid and AGM-style batteries.
- Main line circuit breaker
Protects generator from overload.
- Electronic governor
Maintains constant 60 Hz frequency.

Unit

- SAE weather protective enclosure
Sound attenuated enclosures ensure quiet operation and protection against mother nature, withstanding winds up to 150 mph. Hinged key locking roof panel for security. Lift-out front for easy access to all routine maintenance items. Electrostatically applied textured epoxy paint for added durability.
- Enclosed critical grade muffler
Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
- Small, compact, attractive
Makes for an easy, eye appealing installation, as close as 18" away from a building.

Installation System

- 1 ft (305 mm) flexible fuel line connector
Absorbs any generator vibration when connected to rigid pipe.
- Direct-to-dirt composite mounting pad
Complex lattice design prevents settling or sinking of the generator system.
- Integral sediment trap
Prevents particles and moisture from entering the fuel regulator and engine, prolonging engine life.

16/20/22 kW

Generator

Model	G007035-0, G007036-0, G007037-0 (16 kW)	G007038-0, G007039-0 (20 kW)	G007042-1, G007043-1 (22 kW)
Rated Maximum Continuous Power Capacity (LP)	16,000 Watts*	20,000 Watts*	22,000
Rated Maximum Continuous Power Capacity (NG)	16,000 Watts*	18,000 Watts*	19,500
Rated Voltage	240	240	240
Rated Maximum Continuous Load Current – 240 Volts (LP/NG)	66.6/66.6	83.3/75	91.6/81.3
Total Harmonic Distortion	Less than 5%	Less than 5%	Less than 5%
Main Line Circuit Breaker	70 Amp	100 Amp	100 Amp
Phase	1	1	1
Number of Rotor Poles	2	2	2
Rated AC Frequency	60 Hz	60 Hz	60Hz
Power Factor	1.0	1.0	1.0
Battery Requirement (not included)	12 Volts, Group 26R 540 CCA Minimum or Group 35AGM 650 CCA Minimum		
Unit Weight (lb/kg)	406/186	448/203	466/211
Dimensions (L x W x H) in/mm	48 x 25 x 29/1218 x 638 x 732		
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load**	66	66	67
Sound output in dB(A) at 23 ft (7 m) with generator in Quiet-Test™ low-speed exercise mode**	58	58	58
Exercise duration	5 min	5 min	5 min

Engine

Type of Engine	GENERAC G-Force 1000 Series		
Number of Cylinders	2	2	2
Displacement	999 cc	999 cc	999 cc
Cylinder Block	Aluminum w/ Cast Iron Sleeve		
Valve Arrangement	Overhead Valve	Overhead Valve	Overhead Valve
Ignition System	Solid-state w/ Magneto	Solid-state w/ Magneto	Solid-state w/ Magneto
Governor System	Electronic	Electronic	Electronic
Compression Ratio	9.5:1	9.5:1	9.5:1
Starter	12 Vdc	12 Vdc	12 Vdc
Oil Capacity Including Filter	Approx. 1.9 qt/1.8 L	Approx. 1.9 qt/1.8 L	Approx. 1.9 qt/1.8 L
Operating rpm	3,600	3,600	3,600
Fuel Consumption			
Natural Gas	ft ³ /hr (m ³ /hr)		
	1/2 Load	218 (6.17)	204 (5.78)
	Full Load	309 (8.75)	301 (8.52)
Liquid Propane	ft ³ /hr (gal/hr) [l/hr]		
	1/2 Load	91.6 (2.52) [9.53]	86 (2.37) [8.99]
	Full Load	106.8 (2.94) [11.11]	129.6 (3.56) [13.48]
			142 (3.90) [14.77]

Note: Fuel pipe must be sized for full load. Required fuel pressure to generator fuel inlet at all load ranges – 3.5-7" water column (7-13 mm mercury) for natural gas, 10-12" water column (19-22 mm mercury) for LP gas. For Btu content, multiply ft³/hr x 2500 (LP) or ft³/hr x 1000 (NG). For Megajoule content, multiply m³/hr x 93.15 (LP) or m³/hr x 37.26 (NG)

Controls

2-Line Plain Text Multilingual LCD Display	Simple user interface for ease of operation.
Mode Buttons: Auto	Automatic Start on Utility failure. 7 day exerciser.
Manual	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Off	Stops unit. Power is removed. Control and charger still operate.
Ready to Run/Maintenance Messages	Standard
Engine Run Hours Indication	Standard
Programmable start delay between 2-1500 seconds	Standard (programmable by dealer only)
Utility Voltage Loss/Return to Utility Adjustable (Brownout Setting)	From 140-171 V/190-216 V
Future Set Capable Exerciser/Exercise Set Error Warning	Standard
Run/Alarm/Maintenance Logs	50 Events Each
Engine Start Sequence	Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration).
Starter Lock-out	Starter cannot re-engage until 5 sec after engine has stopped.
Smart Battery Charger	Standard
Charger Fault/Missing AC Warning	Standard
Low Battery/Battery Problem Protection and Battery Condition Indication	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Under-Frequency/Overload/Stepper Overcurrent Protection	Standard
Safety Fused/Fuse Problem Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed (@ 72 Hz)/rpm Sense Loss Shutdown	Standard
High Engine Temperature Shutdown	Standard
Internal Fault/Incorrect Wiring Protection	Standard
Common External Fault Capability	Standard
Field Upgradable Firmware	Standard

**Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters. Rating definitions – Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). * Maximum kilovolt amps and current are subject to and limited by such factors as fuel Btu/megajoule content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases about 3.5 percent for each 1,000 feet (304.8 meters) above sea level, and also will decrease about 1 percent for each 6 °C (10 °F) above 16 °C (60 °F).

16/20/22 kW

switch options

Limited Circuits Switch Features

- 16 space, 24 circuit, breakers not included.
- Electrically operated, mechanically-held contacts for fast, positive connections
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2-pole, 250 VAC contactors.
- 30 millisecond transfer time.
- Dual coil design.
- Rated for both copper and aluminum conductors.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA/UL 3R aluminum outdoor enclosure allows for indoor or outdoor mounting flexibility.
- Multi listed for use with 1" standard, tandem, GFCI and AFCI breakers from Siemens, Murray, Eaton and Square D for the most flexible and cost effective install.

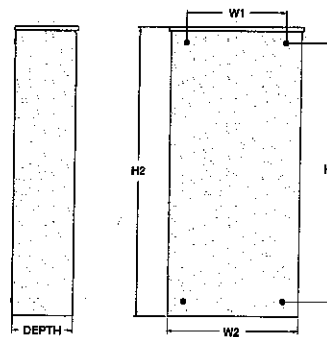
Dimensions

	Height		Width		Depth
	H1	H2	W1	W2	
in	26.75	30.1	10.5	13.5	6.91
mm	679.4	764.3	266.7	343.0	175.4

Wire Ranges		
Conductor Lug	Neutral Lug	Ground Lug
1/0 - #14	2/0 - #14	2/0 - #14

Model	G007036-0 (16kW)
No. of Poles	2
Current Rating (Amps)	100
Voltage Rating (VAC)	120/240, 1Ø
Utility Voltage Monitor (Fixed)*	
-Pick-up	80%
-Dropout	65%
Return to Utility*	approx. 15 sec
Exercises bi-weekly for 5 minutes*†	Standard
UL Listed	Standard
Total Circuits Available	24
Tandem Breaker Capabilities	8 tandems
Circuit Breaker Protected	
Available RMS Symmetrical Fault Current @ 250 Volts	10,000

*Function of Evolution Controller
Exercise can be set to weekly or monthly



Service Rated Smart Switch Features

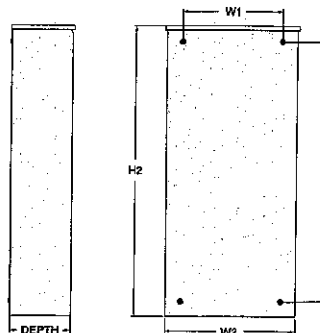
- Includes Digital Power Management Technology standard (DPM).
- Intelligently manages up to four air conditioner loads with no additional hardware.
- Up to four more large (240 VAC) loads can be managed when used in conjunction with Smart Management Modules (SMMs).
- Electrically operated, mechanically-held contacts for fast, clean connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2-pole, 250 VAC contactors.
- Service equipment rated, dual coil design.
- Rated for both aluminum and copper conductors.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA/UL 3R aluminum outdoor enclosure allows for indoor or outdoor mounting flexibility.

Dimensions

	200 Amps 120/240, 1Ø Open Transition Service Rated				
	Height		Width		Depth
	H1	H2	W1	W2	
in	26.75	30.1	10.5	13.5	6.91
mm	679.4	764.3	266.7	343.0	175.4

Model	G007037-0 (16 kW)/G007039-0 (20 kW)/ G007043-0 (22 kW)
No. of Poles	2
Current Rating (Amps)	200
Voltage Rating (VAC)	120/240, 1Ø
Utility Voltage Monitor (Fixed)*	
-Pick-up	80%
-Dropout	65%
Return to Utility*	approx. 13 sec
Exercises bi-weekly for 5 minutes*	Standard
UL Listed	Standard
Enclosure Type	NEMA/UL 3R
Circuit Breaker Protected	22,000
Lug Range	250 MCM - #6

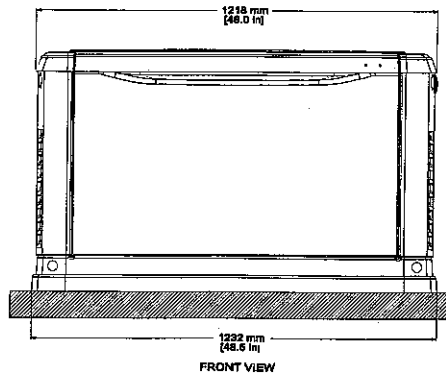
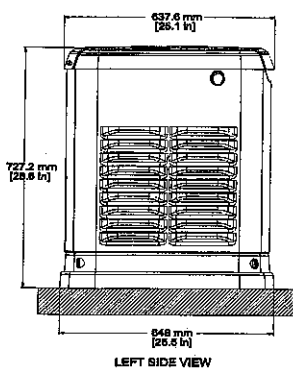
*Function of Evolution Controller
Exercise can be set to weekly or monthly



Model #	Product	Description
G007005-0	Wi-Fi LP Fuel Level Monitor	The Wi-Fi enabled LP fuel level monitor provides constant monitoring of the connected LP fuel tank. Monitoring the LP tank's fuel level is an important step in making sure your generator is ready to run during an unexpected power failure. Status alerts are available through a free application to notify when your LP tank is in need of a refill.
G006463-4	Mobile Link™	Generac's Mobile Link allows you to check the status of your generator from anywhere that you have access to an Internet connection from a PC or with any smart device. You will even be notified via e-mail or text message when a change in the generator's status occurs. Available in the U.S. only.
G005819-0	26R Wet Cell Battery	Every standby generator requires a battery to start the system. Generac offers the recommended 26R wet cell battery for use with all air-cooled standby product (excluding PowerPact®).
G007101-0	Battery Pad Warmer	The pad warmer rests under the battery. Recommended for use if the temperature regularly falls below 0°F. (Not necessary for use with AGM-style batteries).
G007102-0	Oil Warmer	Oil warmer slips directly over the oil filter. Recommended for use if the temperature regularly falls below 0°F.
G005621-0	Auxiliary Transfer Switch Contact Kit	The auxiliary transfer switch contact kit allows the transfer switch to lock out a single large electrical load you may not need. Not compatible with 50 amp pre-wired switches.
G007027-0 - Bisque	Fascia Base Wrap Kit (Standard on 22 kW)	The fascia base wrap snaps together around the bottom of the new air cooled generators. This offers a sleek, contoured appearance as well as offering protection from rodents and insects by covering the lifting holes located in the base.
G005703-0 - Bisque	Paint Kit	If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to properly maintain or touch-up a generator enclosure.
G006485-0	Scheduled Maintenance Kit	Generac's scheduled maintenance kits provide all the hardware necessary to perform complete routine maintenance on a Generac automatic standby generator.
G006873-0	Smart Management Module (50 Amps)	Smart Management Modules are used in conjunction with the Automatic Transfer Switch to increase its power management capabilities. It provides additional power management flexibility not found in any other power management system.

dimensions & UPCs

Dimensions shown are approximate. Refer to installation manual for exact dimensions. DO NOT USE THESE DIMENSIONS FOR INSTALLATION PURPOSES.



Model	UPC
G007035-0	696471070354
G007036-0	696471070361
G007037-0	696471070378
G007038-0	696471070385
G007039-0	696471070392
G007042-0	696471070422
G007043-0	696471070439

Oak Electric Service, Inc
 5492 Dixie Hwy
 Waterford MI 48329



(248) 623-4900 Phone
 (248) 623-4911 Fax
 melanie@oakelectric.com
 www.oakelectric.com

Bill To

Les Stansberry

18471 Roseland
 Lathrup Village MI 48076

Ship To

Les Stansberry

18471 Roseland
 Lathrup Village MI 48076

Work Order # 55671

Transaction Date: 05/04/2018

Terms: Net 10

Quote Q2238

Item	Description	Quantity	Price	Amount
16 kW Generac Generator Whole	Furnish & Install 16 kW Generac generator with whole house ATS: electric wiring, gas piping, permits/inspections, custom wood/ gravel pad, 10 year extended warranty FREE, factory start-up, labor and all material. **IF APPLICABLE**Does NOT include/ Oak is not liable for: Gas meter upgrade by utility company - payment, requests, follow-up and scheduling are to be completed by homeowner. Screening, sprinkler related repairs/tasks and drywall repair not included.	1	\$8,262.00	\$8,262.00
Custom Quote	Bring outside wire up to code to pass inspections on permits that will be pulled	1	\$500.00	\$500.00

ACCEPTED - DEPOSIT MADE

Subtotal	\$8,762.00
Tax	\$0.00
Total	\$8,762.00

Authorization

I hereby authorize Oak Electric Service, Inc to complete the proposed service, repair, or replacement and agree to pay the invoiced amount upon completion. I additionally certify that I am fully authorized to authorize this work and commit to payment.

Acceptance

I accept the services performed by Oak Electric Service, Inc are to my satisfaction.

Payments	\$2,000.00
Balance Due	\$6,762.00