

VILLAGE OF LAKE BLUFF
ARCHITECTURAL BOARD OF REVIEW

TUESDAY, OCTOBER 4, 2016 – 7:00 P.M.

VILLAGE HALL BOARD ROOM
40 E. CENTER AVENUE, LAKE BLUFF, ILLINOIS

AGENDA

1. **Call to Order and Roll Call**
2. **Consideration of the September 6, 2016 Architectural Board of Review Meeting Minutes**
3. **Non-Agenda Items and Visitors (Public Comment Time)**
The Architectural Board of Review Chair and Board Members allocate fifteen (15) minutes during this item for those individuals who would like the opportunity to address the Board on any matter not listed on the agenda. Each person addressing the Architectural Board of Review is asked to limit their comments to a maximum of three (3) minutes.
4. **Consideration of a Sign Permit for Lifesource at 223 Waukegan Road**
5. **A Public Hearing to Consider a Site Plan to Install a Generator and Associated Landscaping at 925 Sherwood Drive**
6. **Staff Report**
 - Next Regular Meeting – November 1, 2016 (1st Tuesday)
7. **Adjournment**

The Village of Lake Bluff is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities, are requested to contact R. Drew Irvin at 234-0774 or TDD number 234-2153 promptly to allow the Village of Lake Bluff to make reasonable accommodations.

**VILLAGE OF LAKE BLUFF
ARCHITECTURAL BOARD OF REVIEW
REGULAR MEETING
SEPTEMBER 6, 2016**

DRAFT MINUTES

1. Call to Order and Roll Call

The meeting of the Architectural Board of Review (ABR) of the Village of Lake Bluff was called to order on September 6, 2016 at 7:00 p.m. in the Village Hall Board Room (40 E. Center Avenue) and the following were present.

Present: Neil Dahlmann
Edward Deegan
Matthew Kerouac
Stephen Rappin
Carol Russ
Bob Hunter, Chair

Absent: John Sorenson, Member

Also Present: Mike Croak, Building Codes Supervisor (BCS)

2. Consideration of the July 12, 2016 ABR Regular Meeting Minutes

Member Russ moved to approve the minutes of the July 12, 2016 ABR meeting as presented. Dahlmann seconded the motion. The motion passed on a unanimous voice vote.

3. Non-Agenda Items and Visitors (Public Comment Time)

Chair Hunter stated the ABR Chair and Board Members allocate fifteen minutes during this item for those individuals who would like the opportunity to address the Board on any matter not listed on the agenda.

There were no request to address the ABR.

4. Consideration of a Sign Permit for Homewerks Worldwide at 45-85 Albrecht Road

Chair Hunter introduced the agenda item and invited Mr. Phil Genitoni of The Alphabet Shop, the sign contractor for Homewerks Worldwide, to the podium.

Chair Hunter asked for comments from the commissioners.

Member Russ stated this is a great location but the signage should be lower given the conditions of the building. She asked if there were discussions regarding the maximum height restriction outlined in the Village regulations. Mr. Genitoni stated a smaller sign was considered; however, the property owner elected to pursue the larger sign.

Member Russ stated it is a good looking sign, a good location and it is hardly visible anywhere except from the direct approach to this building. Mr. Genitoni stated it is a non-illuminated sign and will not be visible in the dark.

Member Rappin asked if any similar exemptions have been granted for the industrial park. BCS Croak stated the last exemption was granted to Lindeman Chimney. Member Rappin stated this is a 20% variation but it is isolated so he is fine with the request.

Member Kerouac commented on the proposed signage and expressed his belief the variance issues would be addressed if the signage was lowered to align with the lighter color of the wall and make the logo smaller.

Member Deegan expressed his agreement with Member Kerouac.

Member Dahlmann stated he would have preferred to see a scaled down version of the signage which complies with the sign code. He expressed his agreement with scaling down the height of the sign.

Chair Hunter expressed his agreement for a scaled down sign and lowering the sign to the buff colored area on the building.

Member Kerouac moved to recommend the Village Board approve an exemption from the Sign Code to exceed the allowable sign area with the following conditions: the bottom of the height to 24 ft. above grade and scale the logo down so the position of the sign aligns with the color change on the facade of the Homewerks Worldwide building. Member Rappin seconded the motion. The motion passed on following roll call vote:

Ayes: Russ, Rappin, Dahlmann, Deegan, Kerouac and Chair Hunter
Nays: None
Absent: Sorenson

5. Consideration of a Sign Permit for The Chevy Exchange at 1 Sherwood Terrace

Chair Hunter introduced the agenda item and invited Mr. Rafat Alamawi, The Chevy Exchange General Manger to the podium.

Mr. Alamawi stated currently The Chevy Exchange does not have any flags on their light poles. They are asking for an exemption to have 34 banner signs on 17 existing light poles. He showed a picture of a Chevy dealership with flags and noted the flags are a nice way to decorate the parking lot. The proposed 6x2 ft. flags will be hung approximately 4 ft. from the top of the 24 ft. light pole.

Member Dahlmann stated he is not in favor of banners and questioned if the existing banners hanging at Knauz Motors were ever approved. Member Dahlmann expressed his concern regarding vehicles parked on the parkway and the disposition of the temporary signage bought over from the previous Chevrolet location. Mr. Alamawi expressed his belief the main pole sign was lowered approximately 10 ft. to meet the sign code requirement.

Mr. Alamawi showed a picture of the lot's current condition. Although there are cars on the lot, it does not have any life. The proposed flags would give the dealership a more welcome feel given its current location. The main focus is to provide the absolute best customer service so they will come back and spend money in Lake Bluff.

Member Deegan stated he does not have any issues with the request and asked if there were a certain amount of banners allowed to be hang in a parking lot. BCS Croak stated the sign code allows four flags to be hung on three poles; however, the exemption requested is for 34 banners on 17 poles.

Member Deegan asked if there was a way to manage the front entranceway and achieve the same effect. Mr. Alamawi stated he is fine with one per pole or just along the exterior of the lot.

Member Kerouac stated the area on the north side of the dealership building does need something to liven up the view. He stated the area should make customers feel like their spending money at a business that cares and he is glad they are trying to liven up the area. .

Member Rappin stated Knauz Motors is located in a highly visible area and should this request get approved it would be unacceptable to grant them the same request. Member Rapping stated he appreciate what The Chevy Exchange is trying to accomplish but until a compromise that will work for all car dealerships in town is reached, he would be against this type of request because it could set a bad precedence.

Member Russ expressed her concern with the vehicles parked on the parkway and noted there was discussion with the previous Chevrolet dealer regarding replacing the signage. Member Russ expressed her understanding there was temporary signage that was supposed to be removed. She stated the flags are categorized as signage and she prefer not to have a banner on each pole. The area really needs to be jazzed up as this is retail and customers need to get a feel that the business is selling quality material. Member Russ stated there should be a different standard for frontage along the highway and asked if the banners really need to go all the way down the lot.

In response to a question from Chair Hunter, Mr. Alamawi stated there are no flags or banners currently on the lot. The goal is not to change the classy reputation of Lake Bluff but improve the exterior appearance of the dealership. A discussion ensued regarding the location of the proposed banners.

Member Russ moved to recommend the Village Board approve an exemption from the Sign Code to permit ten banners on five existing internal light poles along the north side of The Chevy Exchange building. Member Deegan seconded the motion. The motion passed on following roll call vote:

Ayes:	Deegan, Kerouac, Russ, Russ and Chair Hunter
Nays:	Dahlmann and Rappin
Absent:	Sorenson

In response to a question from BCS Croak, Members Dahlmann and Rappin stated they voted against the request because this approval could set a precedent for additional banner signage elsewhere in town.

6. A Public Hearing to Consider a Site Plan to Review Exterior Alterations to the Central Lake County Joint Action Water Agency (CLCJAWA) Building at 200 Rockland Road

Chair Hunter introduced the agenda item and noted the ABR held a public hearing at its July 12th meeting and received a favorable recommendation for the proposed building alterations. Since then CLCJAWA has had a sound engineer measure the existing noise levels outside the water plant and found they are not in compliance with State standards. This is a revised design to bring the building into compliance.

Chair Hunter administered the oath to those in attendance and opened the public hearing regarding the matter.

Mr. Bill Soucie, Operations Director for CLCJAWA commented on the previously approved alterations and noted there are revisions to the previously approved changes to the east elevation of the building. Although the facility has not received any noise complaints during the building permit process and subsequent to the July 12th ABR public hearing, it was determined that the agency is now occasionally out of compliance with the current Illinois Sound Emission Standards. Also, the acoustical consultant determined the new ozone system would exceed standards. Mr. Soucie stated CLCJAWA is requesting consideration of two items i) install noise barriers to mitigate sound emitted by the existing equipment and ii) modifications to the building's appearance which will ensure sound compliance with the new ozone system.

Mr. Soucie showed a picture of the existing building and noted the proposed improvements would be to the east and south sides of the building. He reviewed the noise barrier sound remediation for the existing equipment. He stated the plans are to install a sound barrier wall on the roof of the residual solids processing building. The proposed 20 ft. long by 12 ft. wide by 8 ft. tall wall would wrap around the east and south sides of the unit and only be visible from the facility. The backwash blower room inlets/outlet area located on the south side of the main building will be wrapped with a 17 ft. long, 9 ft. wide and 11 ft. tall sound wall that contains a double door for access to the blowers. The proposed color will match the existing facilities.

In response to a question from the ABR, Mr. Soucie stated the proposed barriers are visible from the Village owned vacant lot to the east and not visible from IL Rt. 176.

Member Russ stated it is wonderful that you are doing this and expressed her concern with the proposed color. Mr. Soucie stated they would use whatever color the ABR recommends.

Member Rappin stated the non-visible sound barrier walls are a better trade off and the plan makes sense.

Member Kerouac thanked CLCJAWA for the presentation and applauded them for being proactive.

Member Deegan stated it looks fine and had no further comments.

Member Dahlman stated he toured the facility and it looks great and he likes what they are doing.

Member Kerouac moved to recommend the Village Board approve a site plan review for exterior alterations to the CLCJAWA building by adding a sound wall to the south side of the building; a sound wall to the roof of the Solids Processing Building with the condition that the color be determined by the ABR. Member Rappin seconded the motion. The motion passed on the following roll call vote:

Ayes:	Russ, Rappin, Kerouac, Deegan, Dahlmann and Chair Hunter
Nays:	None
Absent:	Sorenson

Mr. Soucie stated CLCJAWA also request design changes for ozone system sound compliance. The acoustical engineer is proposing to install a sound wall along the east side of the building, the wall would be 130 ft. long and 16 ft. tall. It would need to be approximately 5 ft. from the east side of the building in order to capture the sound. Mr. Soucie explained the negative impacts from the proposed wall such as hindering building access, obstruct access to yard piping, cost, and appearance. Mr. Soucie stated the other option is internal sound improvements to redirect the sound.

Mr. Soucie showed a picture of the front of the building and noted the proposed modifications would affect the roofline on the east and south elevations.

He showed a picture of the existing louvers on the east and south end of the building and stated the duct work will be enlarged to minimize the sound. The number of previously approved louvers has been reduced and, although larger, will direct the sound that would have spilled from them, through the roof and towards the sky. Additional louvers will be shielded with acoustical hoods that will extend from the wall and direct sound downwards toward the ground. He stated the primary reason for doing this is because they had to remove sound away from the vacant property. The three mitigation measures will bring the building into compliance with the Illinois Sound standards.

Chair Hunter stated he prefer to have the louvers centered between the hoods and expressed his belief the equipment is driving the location not the aesthetics. Mr. Soucie stated with regards to the position the equipment is wedged in there because they had to enlarge the duct work.

In response to a question from Member Dahlmann, Mr. Soucie confirmed much of the sound comes from air movement generated by the dehumidifier. The emergency fans are operated as needed and typically one of the five air preparation units are running.

Member Dahlmann asked if they could install a fan motor that could be slowed down. Mr. Soucie stated these are not HVAC type fans this is equipment with a fixed flow rate. The proposed louvers are vacuum absorption that will take air from outside, separate the oxygen and then exhaust it.

Mr. Soucie showed an aerial view of the building and noted the location of the proposed roof fans. It is the desire of CLCJAWA not to provide a visual barrier for the fans because of the numerous additional roof penetrations that would be required. Mr. Soucie showed pictures of the proposed roof fans with and without screens from the north driveway and east elevations. The two roof mounted fans will be approximately 6.5 ft. wide, 6.5 ft. long and 4 ft. tall and each vision barrier wall would be approximately 5 ft. tall, 17 ft. long and located on the east, north and south side of each fan. The size of the screen walls are larger than the equipment to allow maintenance access.

Member Rappin asked if there were other options considered. Mr. Soucie stated a chimney option was discussed but the roof fans were ultimately selected to redirect the sound through the roof.

In response to a comment from Member Russ, Mr. Soucie explained how the duct work would redirect the soundwave to the ground. Mr. Soucie stated the Village requested the existing and proposed sound be compliant with State and local regulations. He stated once the modifications are completed an acoustical engineer will come back out to ensure the building does comply with the Illinois Pollution Control Board standards.

Member Rappin expressed his concern regarding appearance of the roof fans should the land to the east get redeveloped.

Following a brief discussion, Member Kerouac moved to recommend the Village Board approve the installation of the rooftop vents without screening and the addition of acoustical hoods over certain wall vents. Member Russ seconded the motion. The motion passed on the following roll call vote:

Ayes:	Dahlmann, Deegan, Kerouac, Russ, Rappin and Chair Hunter
Nays:	None
Absent:	Sorenson

7. Staff Report

BCS Croak reported the next regular meeting will be on October 4, 2016.

8. Adjournment

There being no further business to consider and upon a motion duly made and seconded, the meeting was adjourned.

Respectfully submitted,

Mike Croak, CBO, CBCO
Building Codes Supervisor

VILLAGE OF LAKE BLUFF

Memorandum

TO: Chairman Hunter and Members of the Architectural Board of Review

FROM: Mike Croak, Building Codes Supervisor

DATE: October 4, 2016

SUBJECT: **Agenda Item #4 -- Consideration of a Sign Permit for Lifesource at 223 Waukegan Road**

Lifesource has an existing wall sign at 223 Waukegan Road in the Carriage Way shopping center. The existing sign is in disrepair. They propose to replace it with a new wall sign that includes their logo. The new sign would be 13" tall by 21' long, which would be slightly smaller than the existing sign.

Sign Code (L-1 – Wall Signs and Window Signs)	Proposed Signage
1.) One wall signs permitted per lot (2 for corner lots)	Complies – one wall sign proposed
2.) Allowable wall sign area is 60 square feet per sign	Complies – sign is 22.75 sq ft
3.) Height shall not exceed 20' above grade	Complies

The ABR has the authority to:

- Approve the proposed signage; or
- Deny the sign permit.

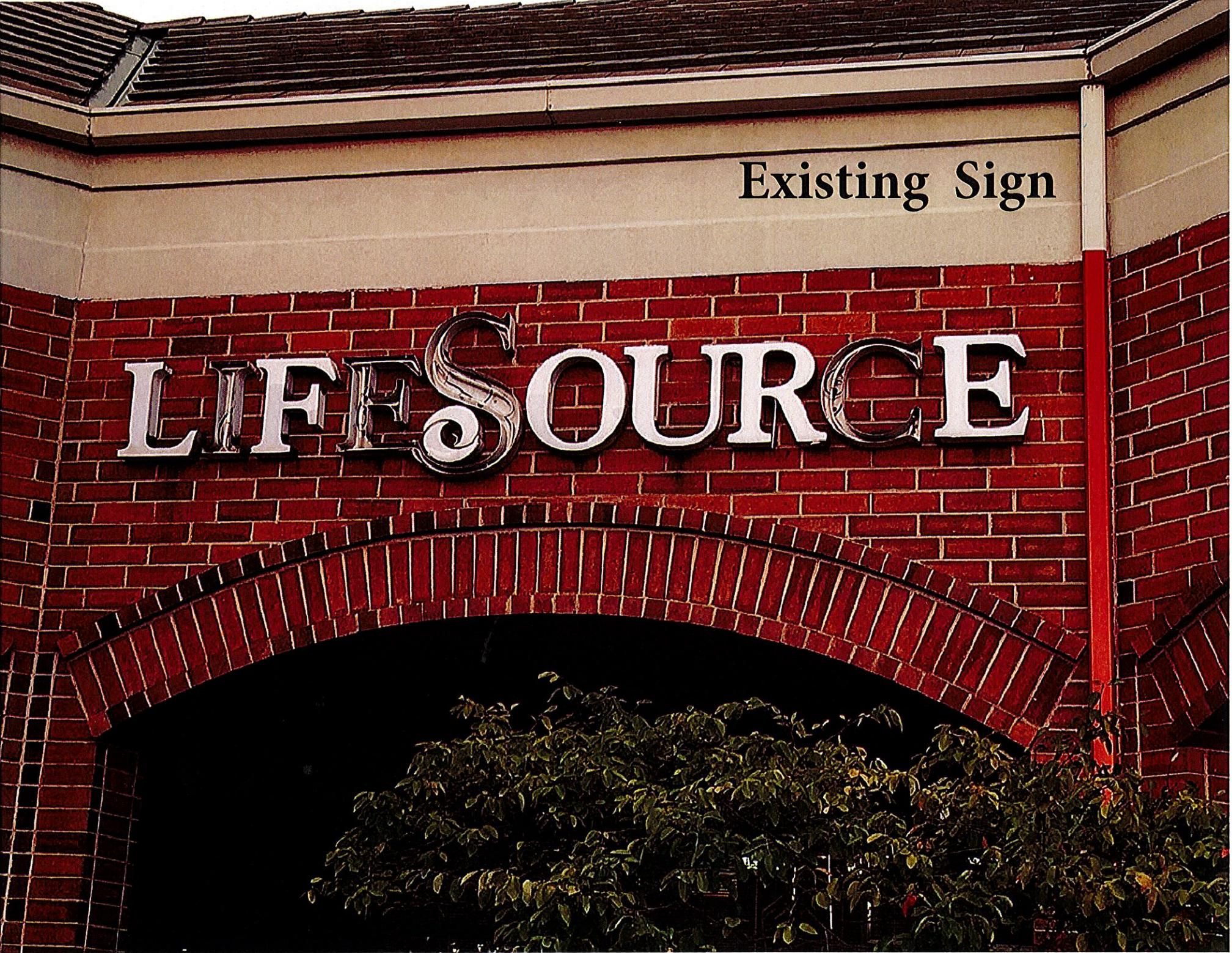
Gary Demma, of Bright Signs and Awnings, and Village Staff will be in attendance at Tuesday's meeting to respond to questions from the ABR. If you should have any questions regarding this matter, please feel free to contact me at 847-283-6885.

Documents Attached:

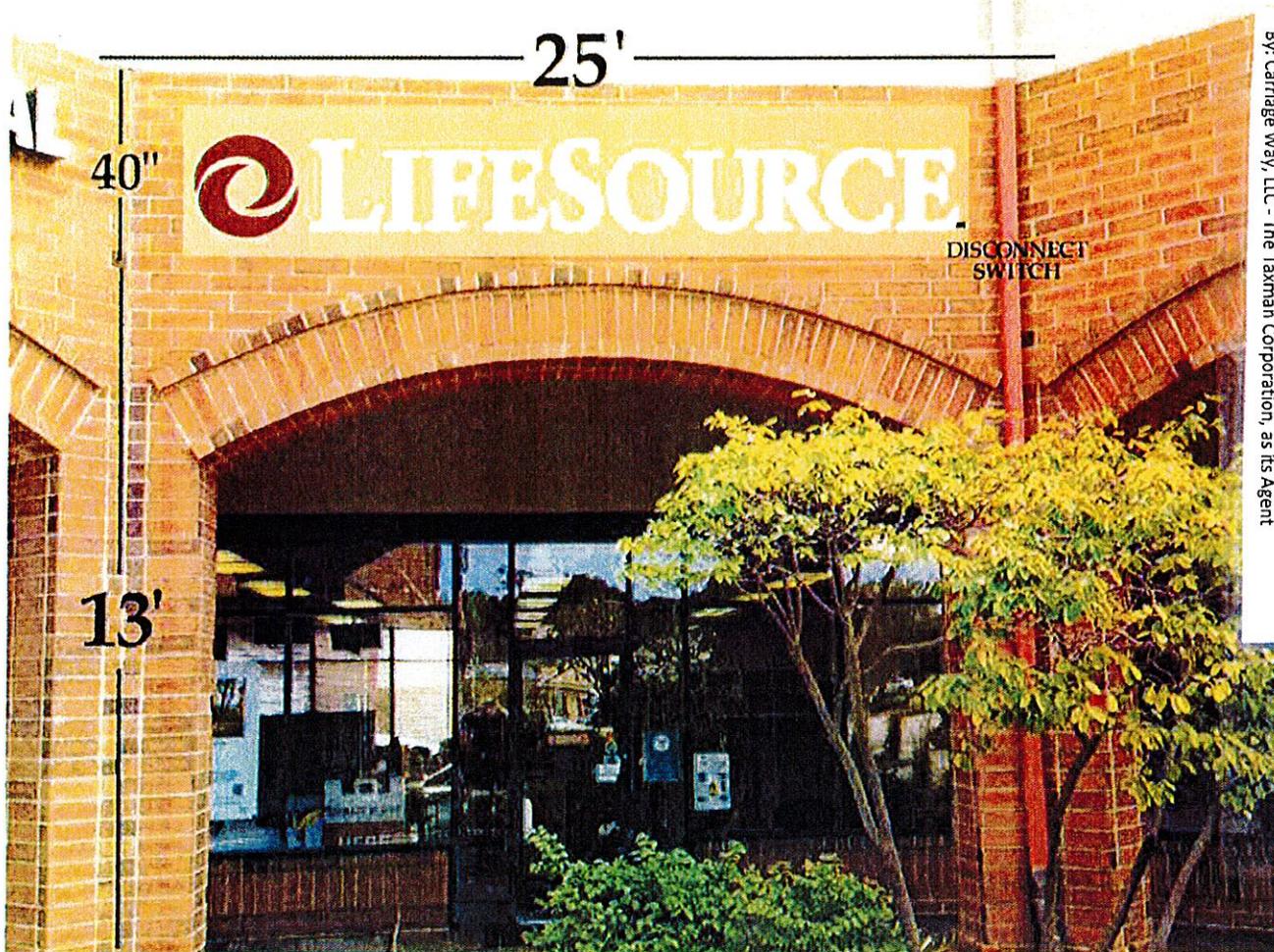
- Photo of Existing Sign
- Drawing of Proposed Sign

Existing Sign

LIFESOURCE



ILLUMINATED CHANNEL LETTERS: 21" X 13'

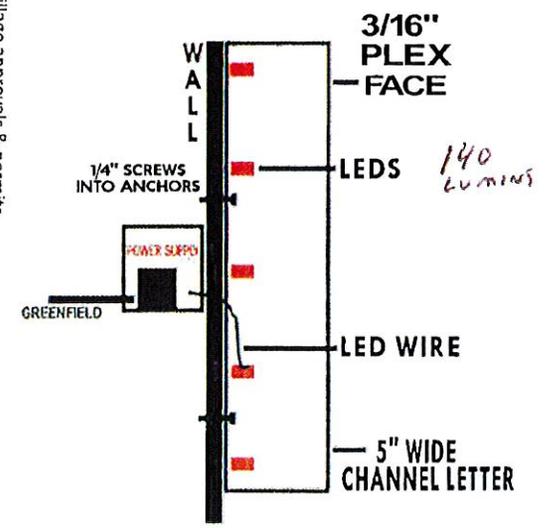


Appvd: Provided Tenant obtains all necessary Village approvals & permits
By: Carriage Way, LLC - The Taxman Corporation, as its Agent

SPEC.

- 3/16" WHITE PLEX FACES
- RED VINYL OVERLAY
- 1" WHITE TRIM
- .040 WHITE SIDEWALLS
- WHITE LEDS
- POWER SUPPLIES

SIDE VIEW



208 W. NORTH AVE 630-629-7446
 LOMBARD, IL 60148 630-629-4655 Fax
 brightsigns@netzero.com

MANUFACTURER INSTALL SERVICE
 ALL INDOOR & OUTDOOR SIGNS AND AWNINGS

CLIENT: **LIFESOURCE**

ADDRESS: **223 WAUKEGAN RD.**

CITY: **LAKE BLUFF** STATE: **IL.**

PLEASE PROOF, SIGN AND DATE IF APPROVED.
 APPROVAL IS ACCEPTANCE OF WORK AS DESCRIBED HERE IN.

SIGNATURE: *Betty Jensen* 09-01-16
 BETTY JENSEN

DATE: **8-21-16**

SALESPERSON: GARY D.

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THE SCALE IN PHOTO RENDERINGS MAY NOT BE ACCURATE.
 REFER TO THE DIMENSIONS IN THE DRAWING ABOVE.

VILLAGE OF LAKE BLUFF

Memorandum

TO: Chairman Hunter and Members of the Architectural Board of Review

FROM: Mike Croak, Building Codes Supervisor

DATE: October 4, 2016

SUBJECT: **Agenda Item #5 -- A Public Hearing to Consider a Site Plan to Install a Generator at 925 Sherwood Drive**

North Shore Dermatology would like to install a generator on the east side of their building at 925 North Shore Drive. They propose to locate it between the driveway and the building, just north of the electrical service. The generator would be 29" tall, 48" wide, and 25" deep. The bushes would be re-arranged as necessary to accommodate and screen the generator.

Recommendation:

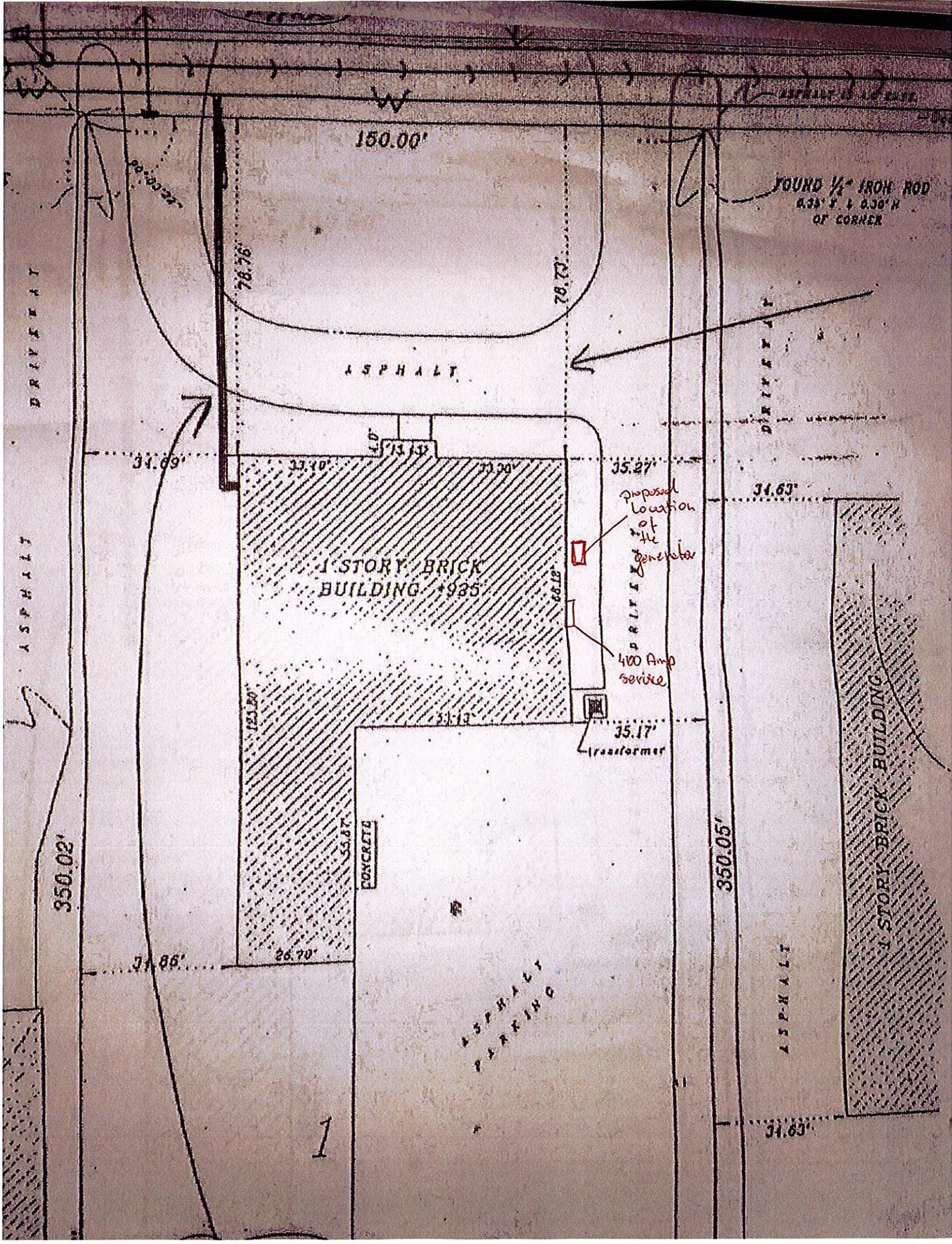
It is recommended the ABR conduct a public hearing to consider modification to the site plan, appropriately question the Petitioner as needed, entertain public comments and questions from the petitioner and make one of the following recommendations regarding the site plan:

- Recommend that the Village Board approve the proposed site plan as presented or with conditions;
- Recommend that the Village Board deny the proposed site plan; or
- Request the petitioner to provide additional information for the ABR's consideration.

Tina Venetos of North Shore Dermatology and Village Staff will be in attendance at Tuesday's meeting to respond to questions from the ABR. If you should have any questions regarding this matter, please feel free to contact me at 847-283-6885.

Attachments:

- Site Plan
- Photo Illustration of Generator in Proposed Location
- Photo of east side of Building
- Generator Specifications



150.00'

FOUND 1/2" IRON ROD
0.34' N + 0.30' W
OF CORNER

ASPHALT

1 STORY BRICK BUILDING +1935

Proposed location of the generator

400 Amp service

transformer

CONCRETE

ASPHALT PARKING

1 STORY BRICK BUILDING

ASPHALT

1





16/20/22 kW

GENERAC®

GUARDIAN® SERIES Residential Standby Generators Air-Cooled Gas Engine

16/20/22 kW

1 of 5

INCLUDES:

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

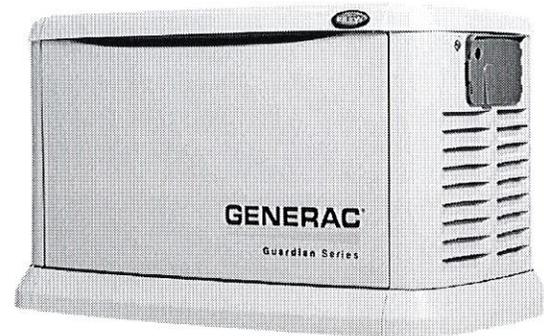
Standby Power Rating

Models 006459-0, 006461-0, 00462-0 (Steel - Bisque) - 16 kW 60 Hz

Model 006721-0 (Aluminum - Gray) - 16 kW 60 Hz

Models 006729-0, 006730-0 (Steel - Bisque) - 20 kW 60 Hz

Models 006551-0, 006552-0 (Aluminum - Gray) - 22 kW 60 Hz



QUIET-TEST

Note: CUL certification only applies to unbundled units and units packaged with pre-wired 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 DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **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.

GENERAC®



features and benefits**16/20/22 kW****Engine**

- Generac (OHVI) 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.
- Quiet-Test™
Greatly reduces sound output and fuel consumption during bi-weekly exercise, compared to other brands.
- "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

- Fully automatic
Transfers your vital electrical loads to the energized source of power.
- Pre-wired, color-coded conduits (Pre-wired switches only)
Ensures the easiest, trouble-free installation.
- DPM Technology (Smart Switch only)
Digital Power Management Technology allows for the smart control of two air conditioners without any additional items.
- 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 60% 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 exerciser
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.
- Electronic governor
Maintains constant 60 Hz frequency.

Unit

- SAE weather protective enclosure
Sound attenuated enclosure ensures 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.
- Composite mounting pad
Eliminates the need to pour a concrete pad unless required by local municipalities.

16/20/22 kW

Generator

Model	006459-0, 006461-0, 006462-0, 006721-0 (16 kW)	006729-0, 006730-0, (20 kW)	006551-0, 006552-0 (22 kW)
Rated Maximum Continuous Power Capacity (LP)	16,000 Watts*	20,000 Watts*	22,000 Watts*
Rated Maximum Continuous Power Capacity (NG)	16,000 Watts*	18,000 Watts*	19,500 Watts*
Rated Voltage	240	240	240
Rated Maximum Continuous Load Current – 240 Volts (LP/NG)	66.6/66.6	83.3/75	91.6/86.3
Total Harmonic Distortion	Less than 5%	Less than 5%	Less than 5%
Main Line Circuit Breaker	65 Amp	90 Amp	100 Amp
Phase	1	1	1
Number of Rotor Poles	2	2	2
Rated AC Frequency	60 Hz	60 Hz	60 Hz
Power Factor	1.0	1.0	1.0
Battery Requirement (not included)	Group 26R, 12 Volts and 525 CCA Minimum		
Unit Weight (lb/kg)	513/232.7 (Steel); 448/203.2 (Aluminum)	516/234.1	526/238.6
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**	60	60	58
Exercise duration	5 min	5 min	5 min

Engine

Type of Engine	GENERAC OHVI V-TWIN	GENERAC OHVI V-TWIN	GENERAC OHVI V-TWIN
Number of Cylinders	2	2	2
Displacement	992 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	193 (5.47)	205 (5.8)	184 (5.21)
Full Load	312 (8.83)	308 (8.72)	281 (7.96)
Liquid Propane	ft ³ /hr (gal/hr) [l/hr]		
1/2 Load	72.4 (1.99) [7.53]	75.6 (2.08) [7.87]	83 (2.16) [8.16]
Full Load	130 (3.57) [13.53]	140 (3.85) [14.57]	127 (3.68) [13.99]

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:	Automatic Start on Utility failure. 7 day exerciser.
Auto	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Manual	Stops unit. Power is removed. Control and charger still operate.
Off	
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 wattage 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

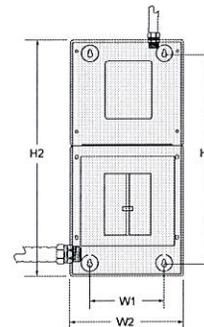
Pre-wired Features

available on Steel 16 kW models only

- 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.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA 1 (indoor rated) enclosure is standard on the pre-wired switch.
- Pre-wired 30 foot (9.1 meter) whip to connect to the provided 5 foot pre-wired whip and external connection box.
- Pre-wired 2 foot (0.61 meter) whip, color coded to connect into the existing electrical panel.

Model	006461-0 (16 kW)
No. of Poles	2
Current Rating (Amps)	100
Voltage Rating (VAC)	120/240, 1Ø
Utility Voltage Monitor (Fixed)*	
-Pick-up	80%
-Dropout	60%
Return to Utility*	approx. 15 sec.
Exercise weekly for 12 minutes*	Standard
UL Listed	Standard
Total of Pre-wired Circuits	16
No. 15 A 120 V	5
No. 20 A 120 V	5
No. 20 A 240 V	1
No. 30 A 240 V	-
No. 40 A 240 V	1
No. 50 A 240 V	1
Circuit Breaker Protected	
Available RMS Symmetrical Fault Current @ 250 Volts	10,000

*Function of Evolution Controller



Dimensions

Mechanical Dimensions					
	Height		Width		Depth
	H1	H2	W1	W2	
in	23.5	26.4	8.3	12.6	6.3
mm	597	671.7	211	320.7	159.6

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

Smart Switch Features

- Includes Digital Power Management Technology standard (DPM).
- Intelligently manages two air conditioner loads with no additional hardware.
- Up to four more large (120/240 VAC) loads can be managed when used in conjunction with Power Management Modules (PMM**).
- 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.
- NEMA/UL 3R aluminum outdoor enclosure.
- Main contacts are silver plated or silver alloy to resist welding and sticking.

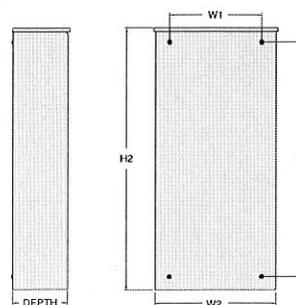
**Note: PMM starter kit is required prior to using the modules.

Dimensions

	200 Amps 120/240, 1Ø Open Transition Service Rated				
	Height		Width		Depth
	H1	H2	W1	W2	
in	27.24	30.0	11.4	13.5	7.09
mm	692.0	762.4	289.0	343.0	180.0

Model	006462-0 (16 kW)/006729-0 (20 kW)/006552-0 (22 kW)
No. of Poles	2
Current Rating (Amps)	200
Voltage Rating (VAC)	120/240, 1Ø
Utility Voltage Monitor (Fixed)*	
-Pick-up	80%
-Dropout	60%
Return to Utility*	approx. 13 sec.
Exercise weekly for 12 minutes*	Standard
UL Listed	Standard
Enclosure Type	NEMA/UL 3R
Withstand Rating (Amps)	22,000
Lug Range	250 MCM - #6

*Function of Evolution Controller



16/20/22 kW

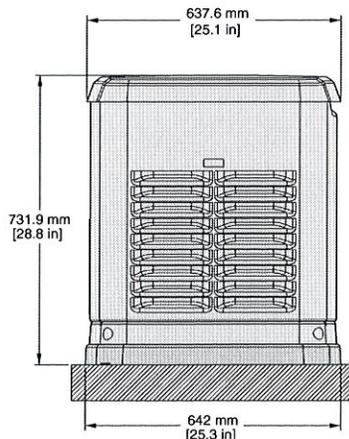
available accessories

Model #	Product	Description
006463-1	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 when a change in the generator's status occurs via e-mail or text message.
005819-0	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®).
006212-0	Cold Weather Kit	If the temperature regularly falls below 32 °F (0 °C), a cold weather kit is required to maintain optimal battery and oil temperatures. Kit consists of a battery warmer and oil filter heater with built-in thermostats.
005621-0	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.
005839-0 - Bisque 005666-0 - Gray	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.
005703-0 - Bisque 005704-0 - Gray	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.
006484-0 - 16 kW 006485-0 - 20 & 22 kW	Scheduled Maintenance Kit	Generac's scheduled maintenance kits provide all the hardware necessary to perform complete routine maintenance on a Generac automatic standby generator.
006664-0	Wireless Remote Monitor	Completely wireless and battery powered, Generac's wireless remote monitor provides you with instant status information without ever leaving the house. Not compatible with CorePower or EcoGen systems.
006199-0	PMM Starter Kit	The PMM Starter Kit consists of a 24 VAC, field installed transformer that enables the use of the 24 VAC Power Management Modules (PMMs) and one PMM. The standard controller (without starter kit) can control two HVAC loads with no additional hardware. Not compatible with pre-wired switches.
006186-0	Power Management Module (50 Amps)	Power Management Modules are used in conjunction with the Smart Switch to increase its power management capabilities. It gives the Smart Switch additional power management flexibility not found in any other transfer switch. Not compatible with pre-wired switches. Note: PMM Starter Kit required.

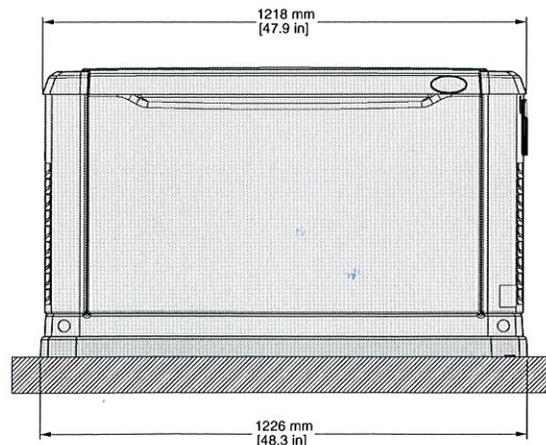
* Note: Bisque kits are used in conjunction with steel enclosures. Gray kits are used in conjunction with aluminum enclosures.

dimensions & UPCs

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



LEFT SIDE VIEW



FRONT VIEW

Model	UPC
006459-0	696471064599
0064610	696471064612
006721-0	696471067217
006729-0	696471067293
006730-0	696471067309
006551-0	696471065510
006552-0	696471065527
006462-0	696471064629