



11333 N. Cedarburg Road
Mequon, WI 53092
Phone: 262-236-2914
Fax: 262-242-9655

www.cityofmequonwi.gov

Office of the City Clerk

BOARD OF APPEALS
Thursday, February 6, 2025
6:00 PM
Christine Nuernberg Hall

Agenda

- 1) **Call to Order**
- 2) **Approve meeting minutes of January 2, 2025**
- 3) **Hear evidence concerning; debate, deliberate and decide the request of:**
 - a) **Applicant:** Jeffrey & Susan Konkel
 - Owners:** Jeffrey & Susan Konkel
 - Appeal:** Opportunity will be given to all interested in being heard concerning the petition by Jeffrey and Susan Konkel to request a variance to Mequon Code Sec 58-419(a) regarding the placement of their existing generator at 10808 N Lake View Road.
- 4) **Adjourn**

Dated: February 6, 2025 */s/ Kathleen Massey, Chair*

Notice is hereby given that a quorum of other governmental bodies may be present at this meeting to present, discuss and/or gather information about a subject over which they have decision-making responsibility, although they will not take formal action thereto at this meeting.

Persons with disabilities requiring accommodations for attendance at this meeting should contact the City Clerk's Office at 262-236-2914, twenty-four (24) hours in advance of the meeting.

Any questions regarding this agenda may be directed to the City Clerk's Office at 262-236-2914, Monday through Friday, 8:00 AM – 4:30 PM



11333 N. Cedarburg Road
Mequon, WI 53092
Phone: 262-236-2914
Fax: 262-242-9655

www.ci.mequon.wi.us

Office of the City Clerk

BOARD OF APPEALS
Thursday, January 2, 2025
6:00 PM
Christine Nuernberg Hall

Minutes

1) Call to Order

Present:

- Chair Kathleen Massey
- Vice Chair Thomas Flanagan
- Board Member Steve Helfer
- Board Member Ramona Larson
- Board Member Robert Stern
- Board Member Kirsten Hildebrand - **Excused**
- Board Member James Wawrzyn - **Non-Voting Attendee**

Also present: City Attorney Sajdak, City Clerk Fochs, interested public.

2) Approve meeting minutes of December 5, 2024

Motion to approve the Board of Appeals meeting minutes of December 5, 2024, with the correction of the spelling of Milwaukee Police K-9 officer's name from Knox to Nox.

RESULT: **Approved by Voice Acclamation [Unanimous]**
MOVED BY: Board Member Massey
SECONDED BY: Board Member Larson

AYES:	Massey, Flanagan, Larson, Stern
ABSTAIN:	Helfer

3) Hear evidence concerning; debate, deliberate and decide the request of:

- a. Applicant:** Jeffrey & Susan Konkel
- Owner:** Jeffrey & Susan Konkel
- Appeal:** Opportunity will be given to all interested in being heard concerning the petition by Jeffrey and Susan Konkel to request a variance to Mequon Code Sec 58-419(a) regarding the placement of their existing generator at 10808 N Lake View Road.

The hearing for Jeffrey & Susan Konkel was rescheduled for February 6, 2025.

Attachment: BOA minutes 1.2.25 (10007 : Jan 2025 minutes)

4) Ordinance

- a. ORDINANCE 2024-1672** - An Ordinance to Amend Section 58-41(g) of the Mequon Municipal Code Related to the Issuing of Decisions by the Board of Appeals.

Packet pages 66-67 were distributed by Chair Massey and included comments that were numbered and highlighted. The comments below summarize those proposed changes to the ordinance as was presented at the meeting on December 5, 2024:

1. There is potential liability to the Board and the City of Mequon if a hearing proceeds without legal counsel due to the City Attorney being unable to attend. Substitute legal representation should be available for each hearing as the Board of Appeals is a quasi-judicial body and requires proper legal counsel.
2. The City Attorney's workload cannot fall under the duties of the Chair of the Board of Appeals. Not every Chair would be qualified to draft a written legal decision if legal counsel is absent from a hearing therefore the Attorney representing the Board should render the decision.
3. The importance of timely Board decisions should be considered. Delays could incur costs to the applicants.

The ordinance included in the packet was in its original form, as had been discussed at the December 5, 2024, meeting. An email was provided to the Board dated Friday, December 20, 2024, from City Attorney Sajdak which reflected the changes requested by the Board. It is this version included in the email of December 20 that should be considered for approval.

The revised ordinance states the City Attorney would get an additional five (5) days after the Board of Appeals for a total of 15 working days to draft the decision. The Board would then have five (5) days to comment and then the decision would be finalized. If more time is required to complete a decision, the Mayor would need to approve additional time up to 60 days. An extension of time beyond 60 days (total days after the hearing date) would need Common Council approval.

Chair Massey requested that each board member speak on record regarding the revised ordinance as shared in the email dated December 20, 2024.

- Member Flanagan agrees with the proposed amendments. The Chair should not be responsible for managing the time of the City Attorney. Should time extensions be needed beyond 60 days, the Mayor and Common Council should be involved in the decision.
- Member Helfer was not at last month's meeting and abstained from voting on the ordinance.
- Member Stern agrees with the revised ordinance.
- Member Larson agrees with the revised ordinance.

City Attorney Sajdak explained that after the Board recommended the Ordinance, it will go to the Planning Commission, then to the Public Welfare Committee and finally to the Common Council for approval.

Motion to approve the Ordinance version provided in the December 20, 2024, email.

RESULT: Approved by Roll Call Vote [Unanimous]
MOVED BY: Board Member Massey
SECONDED BY: Board Member Flanagan

AYES: Massey, Flanagan, Larson, Stern
ABSTAIN: Helfer

Announcement: Alternate Member Hildebrand submitted her resignation from the Board as of January 13, 2025, because she is moving out of Mequon.

Chair Massey asked to discuss potential guidelines at a future meeting regarding when an applicant can submit arguments or evidence. There have been recent instances of applicants submitting an argument last minute or bringing forward new arguments at the meeting. When information is submitted late, it does not allow the Board or City Staff to review it in a timely manner. The Board should look at the current stated timelines regarding making an argument verbally or in writing and determine if there should be a final deadline as to when such arguments or exhibits can be accepted.

City Attorney Sajdak verified that the basis for their appeal should be spelled out on the application. However, the level of specificity provided in an appeal can vary greatly based on the applicant. The Chair does have the power to adjourn a meeting if it is deemed that the Board needs additional information or time to review last-minute arguments.

Member Wawrzyn said he feels there is a need for more clarity regarding the definition of “hardship” and what that means for the applicant. Perhaps the application itself can be revised to clarify what the Board can review or decisions it can overturn.

5) Adjourn

Motion to adjourn at 6:27 PM

RESULT: Approved by Voice Acclamation [Unanimous]
MOVED BY: Board Member Massey
SECONDED BY: Board Member Stern

AYES: Massey, Flanagan, Helfer, Larson, Stern

Respectfully Submitted,

Beth Kong
Deputy Clerk

Attachment: BOA minutes 1.2.25 (10007 : Jan 2025 minutes)

BOARD OF APPEALS VARIANCE APPLICATION

CITY OF MEQUON, WISCONSIN

Applicant: Jeffrey and Susan Konkel Address: 10808 N. Lake View Rd.
City/zip: MEQUON, WI 53092

Owner: -same as above- Address: -same as above-
City/zip: _____

Contact Person/Name: Susan Konkel

Phone Number: H: 262-241-3711 Email: suekonkel@hotmail.com
(Land Line)

TO THE BOARD OF APPEALS:

*PER Attached email -
Table 58-249 PER Greg Cole
Section 58-419(a) Cole
Section 58-8*

The above hereby requests a variance to City of Mequon Code Sec. #: _____
regarding: _____

10808 N. Lake View Rd - MEQUON - WI - 53092
(street address or legal description)

in order to: allow existing placement of Konkel generator
due to property hardship, as explained, in our letter
dated: October 29th 2024

APPLICANT MUST PROVIDE:

Application form
\$250 filing fee

1 copy each of the following documents

1. Copy of denial letter if any, or a description of the denial
2. Letter explaining hardship or practical difficulty in complying with the ordinance requirement(s)
3. Detailed dimension drawing of/and indicating area where appeal/variance is requested
4. Elevation drawings if appropriate (4 views)

FOR OFFICE USE ONLY

Receiving Officer: <u>CF</u>	Received Date: _____
Parcel #: <u>15-084-03-08-000</u>	Hearing Date: <u>1-2-2025</u>
Zoning District: <u>R3</u>	Receipt #: _____
Alderman & District #: <u>8 Bill Gebhardt</u>	Published: <u>12-19-2024</u>

c: Notice of scheduled hearing to DISTRICT ALDERPERSON, OWNER(S) OF RECORD as listed in the Office of the Assessor and all parcels in the City of Mequon as per state statute and City of Mequon Communication Policy.

Attachment: Konkel Application 1 (9950 : Konkel Application)

Cover Letter

Date: October 29th 2021

To: City of Mequon
Board of Appeals
11333 N. Cedarburg Rd.
Mequon, WI 53092

From: Jeffrey and Susan Konkel
10808 N. Lake View Rd.
Mequon, WI 53092
H: (262) 241-3711 (Landline)

RE: Board of Appeal Variance Application

To Whom It May Concern:

Please find the following, as part of the application and review process for our property variance request:

- Variance Application
- Compliance denial (email) per Greg Golden
- Code(s) sited per a (email) per Greg Golden
- Letter explaining hardship to include an attachment
- Survey in larger envelope, labeled Exhibit #1
- Exhibit and Photo Binder, to include 8 Exhibits and 19 Photos

Thank you.

Sincerely,

 Susan M. Konkel
Jeffrey and Susan Konkel

Attachment: Konkel Application 1 (9950 : Konkel Application)



Jeffrey Konkelsr SR <j.konkelsr@gmail.com>

10808 N. Lakeview Rd.

1 message

Greg Golden <ggolden@ci.mequon.wi.us>
To: "jberg@jrbelectric.com" <jberg@jrbelectric.com>
Cc: Jeffrey Konkelsr SR <J.konkelsr@gmail.com>

Mon, Sep 30, 2024 at 3:24 PM

Good afternoon,

I performed a final inspection of the generator installation at 10808 N. Lakeview Rd. on Friday, 9-27-24, and have some issues to correct:

- Generator is in the front 50' setback; it will need to be relocated.*
- Grounding electrode conductor to be terminated within 5' of water pipe entering building.
- Expose both ground rods for inspection.
- Main bonding jumper in panel still touching neutral bar; remove screw and three bonding jumpers.

*Please call me or set up a time to meet with me in my office to discuss where the generator can be located.

Thanks,



Greg Golden

Building Inspections Supervisor

City of Mequon

Master Electrician

11333 N. Cedarburg Rd. | Mequon, WI 53092

262-236-2921 | ggolden@ci.mequon.wi.us

Central Scheduling: (262)236-2930

Attachment: Konkelsr Application 1 (9950 : Konkelsr Application)

Outlook

RE: Generator Setbacks

From Greg Golden <ggolden@ci.mequon.wi.us>
Date Tue 10/1/2024 12:14 PM
To Susan Konkel <suekonkel@hotmail.com>
Cc Jeffrey Konkel <j.konkelsr@gmail.com>

Susan and Jeff,

Table 58-249 of the Mequon Code of Ordinances (link [here](#)) gives the technical requirements for residential zoning districts. Your property is zoned R-3. Using the table, the required setback from local streets is 50 feet. Then we need to go to Section 58-419(a) which covers structures other than buildings and states “all structures shall be subject to the setback, offset...” Finally, we look at Section 58-8, Definitions; Structure: a combination of materials other than natural terrain or plant growth erected or constructed to form among other things, a building, shelter, sign, enclosure, retainer, container, support, base, or decoration. Air conditioners and generator fall under this definition of a structure. Let me know if you need anything else.

Thanks,

Greg Golden
Building Inspections Supervisor
City of Mequon
Master Electrician
11333 N. Cedarburg Rd. | Mequon, WI 53092
262-236-2921 | ggolden@ci.mequon.wi.us
Central Scheduling: (262)236-2930

From: Susan Konkel <suekonkel@hotmail.com>
Sent: Tuesday, October 1, 2024 11:30 AM
To: Greg Golden <ggolden@ci.mequon.wi.us>
Cc: Jeffrey Konkel <j.konkelsr@gmail.com>
Subject: RE: Generator Setbacks

Hi Greg,

Jeff & I would like the actual written City of Mequon code compliance document that sites the 50' setback for residential home generators, as indicated in your recent correspondence.

Attachment: Konkel Application 1 (9950 : Konkel Application)

October 29th 2024

Jeffrey and Susan Konkell
10808 N. LakeView Rd.
Mequon, WI 53092

City of Mequon
Board of Appeals
11333 N. Cedarburg Rd.
Mequon, WI 53092

To the Board of Appeals,

We are hereby requesting consideration for a lot/property variance allowing for the current placement of our generator on our west side, side-lot due to the following property hardships.

1. Our lot/property is uniquely shaped. It fronts (3) streets—Lake View Road to the (W), Ravine Drive to the (S), and Ravine Court to the (E). Our lot has been referred to as a triple-frontage lot. It also has a severely curved tapered (radius), along Ravine Drive and Lake View Road, extending to the (NW) corner of our lot/property—offering us only a (1) 20' offset on our (N) lot/property line. It is because of our unique lot/property configuration combined with required setback and offset that lessens usage to only 22.1% of our total lot/property. (RA Smith, our surveyor, calculated this percent.) This leaves more than three-quarters of our lot/property unusable. This alone is a significant property hardship. (Exhibit #1, Survey)

2. Also, our lot/property sits below road grade on the entire (SW,W) side-lot of property to the street(s) Ravine Drive and Lake View Road. A deep open culvert (on the SW radius) bridges both the street and west, side lot/property. (Our west-side lot to the field stone bed along the west side of house is original grade—never filled or altered.) During spring thaw and heavy rainfall events, water spillage, runoff and ponding extends beyond the culvert to our (NW corner) and west, side lot/property, flowing and draining along the (N) fence line, to the (E) and then to the ravine. Our lot pitches (W) to (E) and (S) to (N). (Exhibit #1, Survey and Photo's #1,2,3,6,7,9,12)

(Please note: One of the driest, high-ground areas on our west, side-lot (original grade area), is a ridge along the (S) birch garden bed, which includes—where our generator is placed. At this point water sheds to the (N,NE) back around to the (NE) corner of our house--then draining along the (N) fence line (E) to the ravine.) (Photo #12)

3. In addition to the below grade and water/drainage issues, on our west, side lot/property, our entire property serves as a watershed, drainage way accommodating water from all sides/directions eventually draining to the ravine—which is the vacated portion of Ravine Court, attached to our lot/property. (Exhibit #1, Survey) (4) Buried culverts pipes indicate again (per our survey) that all water flows to our property and not

-2-

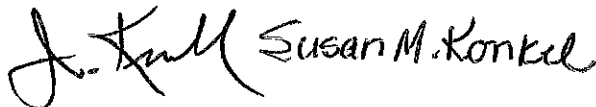
a way. This includes all properties to the west and beyond, to the north, to the south, draining northern portions of Virmond Park, and to the east, as indicated by a *storm water catch basin—which is also shown on our survey. (Photo's #1,2,4,5)

(*Please note: This storm water, catch-basin was placed (in the mid 90's) without permission and without an easement agreement by the City of Mequon—thus becoming an encroachment onto our (E) lot/property. (Exhibit #1, Survey and Photo #5) To this day, The City of Mequon is not able to identify the source of water that is being drained onto our property. As stated, per a recent conversation with Cole McCraw, Assistant City Engineer, the file/records may no longer be available due to the length of time when installed. He also said that he would refer our inquiry to the Public Works Department... But received no call back, to date.)

Even though these property hardships are exclusive to our variance request, there are other important placement and clearance factors, along with safety considerations key to the placement of our generator. They are listed and referenced on Attachment #1, which follows this letter.

It is our hope that with your review of all documents, exhibits, and statements presented, that they will provide for a more clear and better understanding as to why we are seeking/requesting a variance for the current placement of our generator. Our current placement creates no harm (detriment) to any adjacent or neighboring properties, including our own. It is also our hope that we have met the threshold for unnecessary property hardship and that our request for a variance will be granted.

Respectfully submitted,



Jeffrey and Susan Konkel

Attachment #1

(Exhibit/Photo Reference(s) for: Placement, Clearance, and Safety Criteria)

1. Kohler Generator Specs (Exhibit #2, and Photo #10)

2. Location/Mounting/Placement Criteria: (Exhibit #3,7)

- Flat surface
- Access for Maintenance and service
- Support the weight of the generator and mounting pad (Total Weight: 1500 lbs)
- Support the generator set weight for the lifetime of the generator set—which is 25-40 years
- Meet applicable building code
- Not subject to flooding

3. Also: Kohler-Generator Location Criteria: (Exhibit #3)

- Install the generator set outdoors and near incoming gas service. The generator set location must also allow easy access for maintenance and service....
- Locate the generator set so the hot exhaust does not blow on plants or other combustible materials. No plants, shrubs, or other combustible are allowed within 1.2m (4 ft.) of the exhaust end of the generator set.
- Do not install the generator set where exhaust gas could accumulate and seep inside or be drawn into a potentially occupied building....

4. Clearance Allowance(s) for ****Homeowners safety: (Exhibit #3,4,5,6)**

- For Windows: 5' clearance allowance (3 double- windows)
- For window wells: 5' clearance allowance (1 vented window well)
- For furnace vent: 4' clearance allowance, per phone conversation with Dave, Cliff Bergin & Associates, Monday, 10-07-24
- For furnace vent: 10' clearance allowance, per Kohler spec sheet
- For cold air intake: 10' clearance allowance, also per same phone conversation with Dave, Cliff Bergin & Associates, Monday, 10/07/24

4. Well and Utility Maintenance: (Exhibit #1, Survey and Photo #7,9,13,15,16,17,18)

For the maintenance of our well per a recent phone conversation with our well servicer Fred Groth of Groth Water Well—he stated that a service pathway should

-2-

allow for a 10-11' wide pathway (for his smaller rig truck) and a 25' wide service pathway (for his larger rig truck). The current service pathway begins to the west of our front walkway, continuing westward, between the (SW) corner of our house and the (S) birch tree bed (where our generator is located) then a sharp 45 degree turn (N) to the well pipe. We are currently on our 3rd well pump.

There are also many other utilities feeding into the west side to house that are also subject to access and maintenance allowances—including the ability to access buried lines through trenching, if necessary. All are listed on our survey. (Exhibit #1, Survey)

The utilities from (N) to (S) on west side of house are as follows... (Exhibit #1, Survey, Photo #14)

Utilities North of Chimney:

- Air Conditioning unit and control box to house
- Furnace exhaust vent
- Fresh air intake

Utilities South of Chimney:

- Well waterline
- Secondary ground (recently placed)
- Back flow preventer
- Irrigation supply line
- Spectrum cable line
- AT&T landline
- Electric meter
- Electric line feeding from the west, newly relocated/placed
- Abandoned old electric line
- Electric line to generator
- Gas meter
- Gas supply line to generator

5. ****Safety and Health and protocols: (Exhibit #3,7,8)**

WARNING (Statement from Kohler) (Exhibit #3)

--**Do not** locate the generator set near patios, decks, play areas, or animal shelters. Keep items such as lawn furniture, toys, sports equipment and all combustible materials away from the generator exhaust outlet.

-3-

--Remind family members, children, and visitors to use caution near the generator set. Generator components become hot when generator set is running and remain hot for a time after the generator set shuts down.

--NFPA 37 Overview and Requirements: All listed on Exhibit #7

--Kohler Safety Precautions and Warnings: All listed on Exhibit #8

PLAT OF SURVEY

Lot Eight (8) of Block Three (3) in MICHIVUE, being a subdivision in the Northwest 1/4 of Section 28, Township 9 North, Range 22 East, in the City of Mequon, Ozaukee County, Wisconsin, and the West 1/2 of the vacated Street adjoining Lots 7 and 8 on the East, as noted in Order of Discontinuance of Highway recorded on June 7, 1951 in Volume 13 of Miscellaneous on pages 333 to 338, as Document No. 146099.

Tax Key No. 15-084-03-08-000
Property Address: 10808 Lake View Road, Mequon, WI 53092

Bearings are based on the Wisconsin County Coordinate System, Ozaukee County.

This survey was prepared based on Chicago Title Insurance Company title commitment number 02-23285, effective date March 30, 1992, which lists the following easements and/or restrictions from schedule B-II. (Note, any easements which may have been recorded after the effective date are not shown):

9. Easements, if any, of the public or any school district, utility, municipality or person, as provided in Section 80.32(4) of the Statutes, for the continued use and right of entrance, maintenance, construction and repair of underground or overground structures, improvements or service in that portion of the above-described premises which were formerly a part of street now vacated. **Lies within or crosses the surveyed property - its location is shown.**

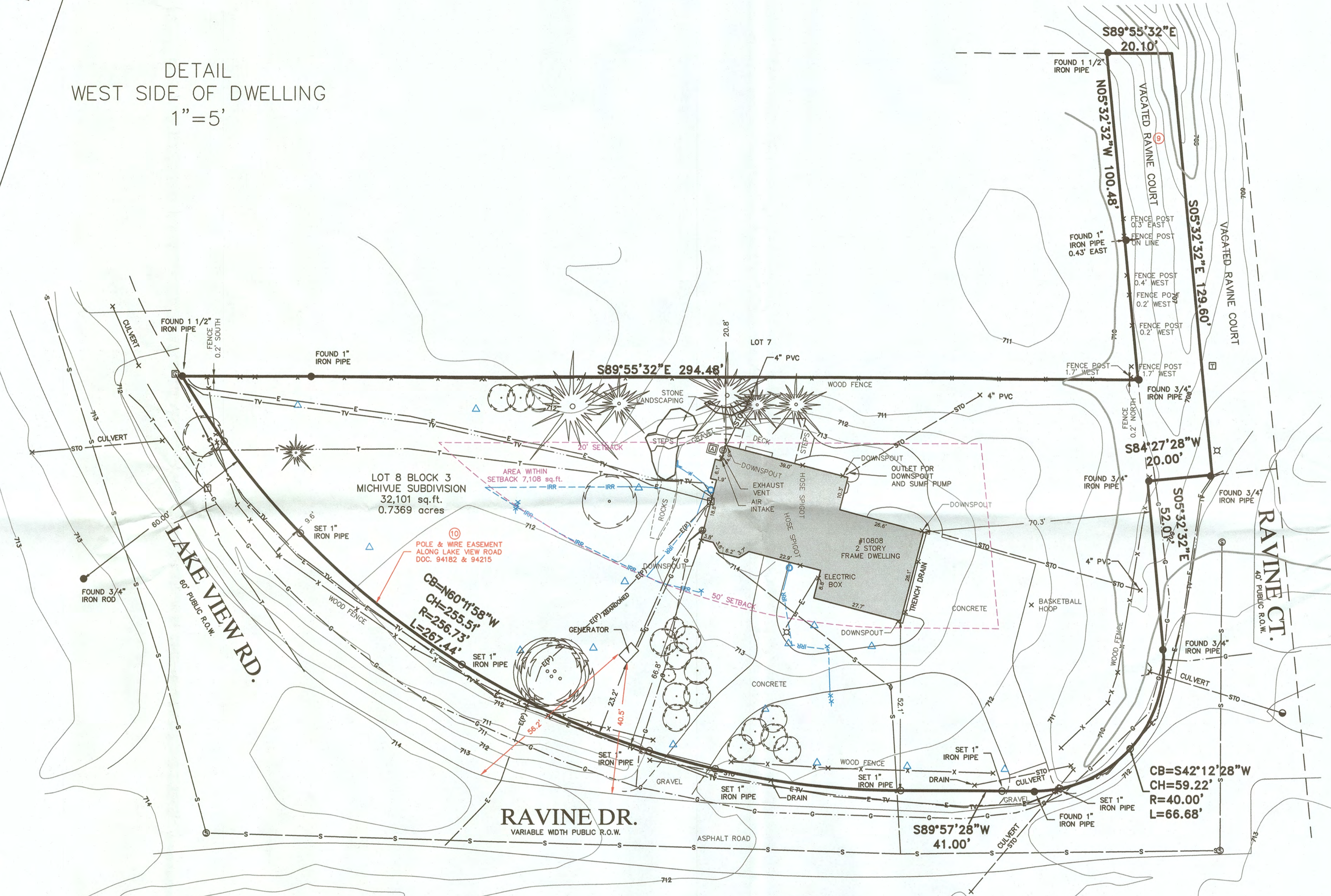
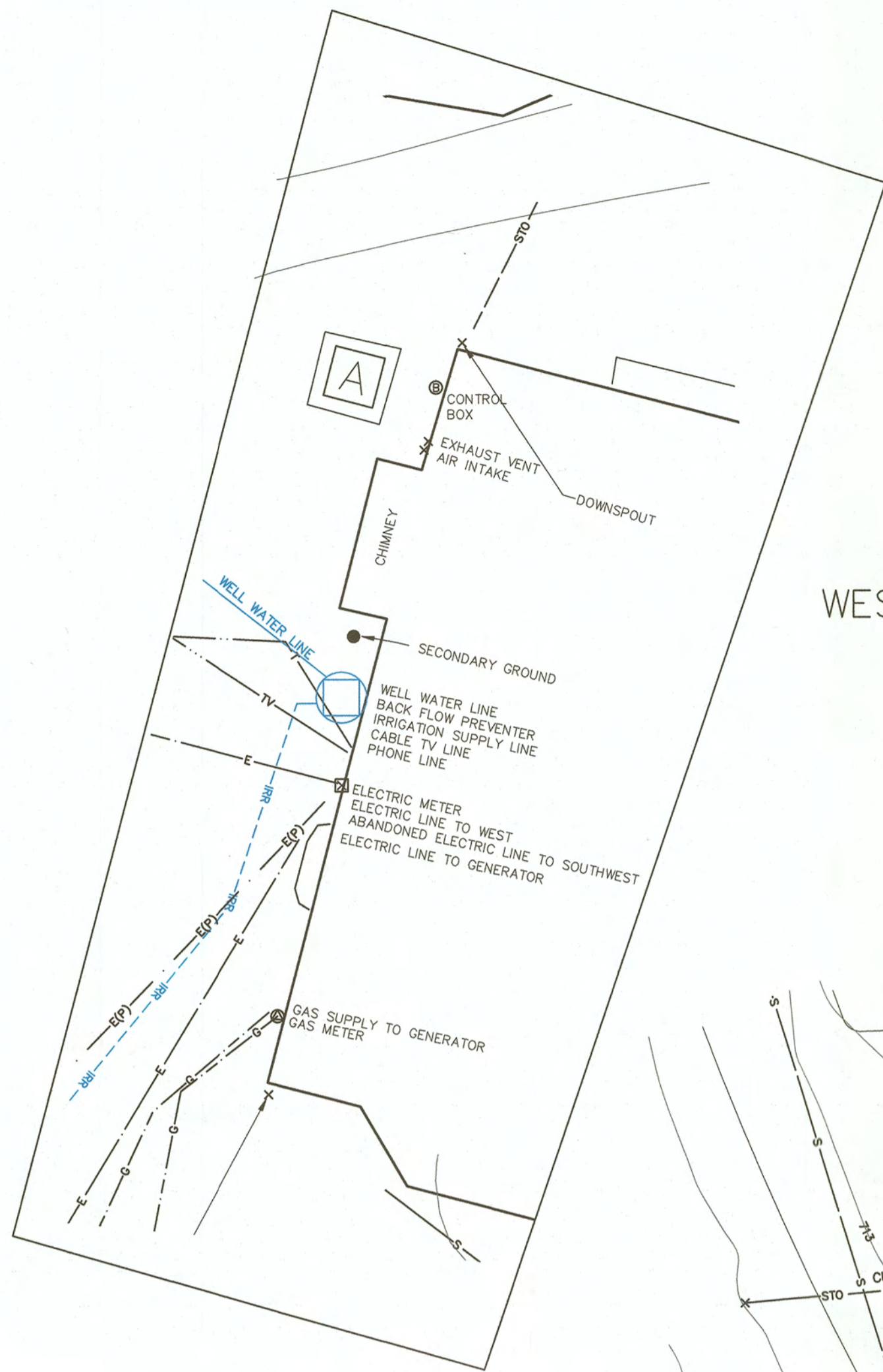
10. Utility easement granted by Shorewood Realty Company to The 1.11waukee Electric Railway and Light Company and Wisconsin Telephone Company by an instrument dated March 10, 1927 and recorded in the office of the Register of Deeds for Ozaukee County, Wisconsin on March 12, 1927 in Volume 7 of Miscellaneous on page 295, Document No. 94182 and re-recorded as utility easement granted by Shorewood Realty Company to Wisconsin Gas and Electric Company and Wisconsin Telephone Company by an instrument dated March 10, 1927 and recorded in the office of the Register of Deeds for Ozaukee County, Wisconsin on March 22, 1927 in Volume 7 of Miscellaneous on page 297, Document No. 94215. **Lies within or crosses the surveyed property - it is a blanket easement - its location is not shown.**

Elevations refer to NAVD88 Datum.

In accordance with Chapter A-E 7.01 (2) of the Wisconsin Administrative Code, R. A. Smith, Inc. has executed an agreement to waive the setting of monuments on the above described property. Signatures on file with Surveyor.

USEABLE AREA: 7,108 sq. ft. = 22.1%
32,101 sq. ft.

DETAIL
WEST SIDE OF DWELLING
1"=5'



- ### LEGEND
- AIR CONDITIONER
 - BACK FLOW PREVENTOR
 - ⊕ LIGHT POLE
 - ⊠ ELECTRIC METER
 - ⊞ TELEPHONE PEDESTAL
 - ⊙ CONTROL BOX
 - ⊕ WELL
 - ⊙ GAS METER
 - ⊙ ROUND INLET
 - ⊙ STORM SEWER END SECTION
 - ⊙ SANITARY MANHOLE
 - ⊕ IRRIGATION CONTROL BOX
 - ⊕ SPRINKLER HEAD
 - ⊕ CONIFEROUS TREE
 - ⊕ DECIDUOUS TREE
 - S — SANITARY SEWER
 - ST — STORM SEWER
 - W — WELL LATERAL
 - IRR — IRRIGATION LINE
 - G — MARKED GAS MAIN
 - E — MARKED ELECTRIC
 - T — MARKED TELEPHONE
 - TV — PROPOSED CABLE TV

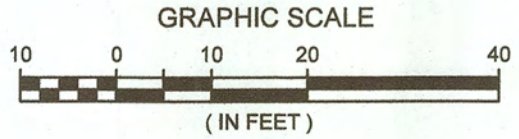
DIGGERS HOTLINE TICKET NO. 20244210118

THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.

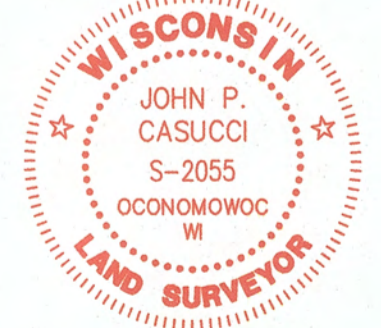
(P) INDICATES PIPE SIZES PER RECORD PLANS. OTHER PIPE SIZES ARE ESTIMATED. NO PIPE SIZES SHOULD BE RELIED UPON WITHOUT FURTHER VERIFICATION.

R.A. SMITH, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF R.A. SMITH, INC.

ALL COPYRIGHTS TO THESE DRAWINGS ARE RESERVED. THEY MAY NOT BE COPIED, CHANGED, OR ASSIGNED TO ANY THIRD PARTY IN ANY MANNER WITHOUT OBTAINING THE EXPRESSED WRITTEN PERMISSION OF R.A. SMITH, INC.



I CERTIFY, that this survey was prepared under my supervision and is correct to the best of my professional knowledge and belief and complies with Chapter A-E 7 of the Wisconsin Administrative Code.
Date: October 16, 2024



John P. Casucci
JOHN P. CASUCCI
WISCONSIN PROFESSIONAL LAND SURVEYOR S-2055

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

Attachment: Konkel Survey Exhibit 1 (9953 : Konkel Survey Exhibit 1)

Exhibits and Photos

Please note: Exhibits and photos are all listed, labeled in same order—some exhibits may contain more than (1) page.

- Exhibit #1: Survey by R.A. Smith (Not included in binder—separate labeled envelope)
- Exhibit #2: Kohler Generator Specs
- Exhibit #3: Kohler Installation (Key Specifications)
- Exhibit #4: Carrier Important Information
- Exhibit #5: Setback Requirements
- Exhibit #6: West Side House Elevation, Architectural Drawing, Waldemar Lange
- Exhibit #7: NFPA 37 Overview (National Fire Protection Association's Standards)
- Exhibit #8: Kohler Safety Precautions

- Photo #1: (NW) corner of our lot/property during spring thaw
- Photo #2: (NW) corner of our lot/property—Watershed-drainage, ponding, after spring rain
- Photo #3: Edge of Road, beginning at Ravine Drive—Open culvert bridging road to our West, side lot/property
- Photo #4: Water drainage from Virmond Park to our (S) buried culvert pipe
- Photo #5: Encroachment onto our (E) lot/property—Storm water, catch-basin installed by The City of Mequon
- Photo #6: View of our (N) lot/property line, looking (NW—Pitch is (W) to (E) to ravine
- Photo #7: Well service area—Also, showing (S) to (N) pitch to fence line and then to ravine
- Photo #8: (SW) corner view of our house and sloping garden bed—also open down-spout
- Photo #9: Again, well service area—and pitch (S) to (N)
- Photo #10: The placed Kohler Generator in birch bed—looking (SE) to Virmond Park
- Photo #11: Edge of road to property line to generator...
- Photo #12: Generator showing high-ground placement in birch garden be—also showing Pitch (S) to (N)
- Photo #13: Generator service pathway, per labeled photo
- Photo #14: West side view of house, all utilities listed per labeled photo
- Photo #15: Well pipe placement
- Photo #16: Well servicer on well cap
- Photo #17: New electric service to house by WE Energies—trench along house
- Photo #18: Again, new electric feed to house—trench abutting house 6-7' deep

Exhibit #2



- Home Energy
- Products
- Parts & Accessories
- Buyer's Guide
- Owner Support
- Find a Dealer
- Get a FREE Quote
- For Professionals
- Search



26 kW Generator

26RCA with KOHLER Energy Management mobile app

Starting at ~~\$14,620~~ ^{MSRP} (i)

Model Number 26RCA

Fuel Type Natural Gas | LPG

Phase Single Phase

Remote Monitoring Included

GET A QUOTE

Features

Specs

Model	26RCA
Rated kW LP	26 kW
Rated kW NG	24 kW
Amps LP	109 amps
Amps NG	100 amps
Peak Motor Starting kVA @240 V	39 kVa
Alternator Note	All information shown is for 1 Phase 60 Hz generator with the largest alternator option available.
Displacement	999 cm ³ (61 cu. in.)
Horsepower	NG 33.0 HP, LP 36.4 HP
Enclosure Material	Aluminum
Sound Output During Weekly Exercise	56 dB(A)
Sound output During Full-speed Operation	67 dB(A)
Response Time	10 seconds
Warranty	Premium five-year limited warranty
Country of Origin	US
Certifications/Listings	cUL ListedEPAUL 2200
Automatic Transfer Switch Included	Included
Remote Monitor Available	Included
Off Grid / Utility backup	Utility Backup



Dimensions - NEXT Page
W: 47"
D: 26"
H: 32.3



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Weight	625 lbs. (625 kg)
Alternator Type	2-Pole, Rotating Field
Fuel Consumption on NG at 50% Load?	180 cfh
Fuel Consumption on LP at 50% Load?	85 cfh
Controller	RDC2 Controller
Cylinder Arrangement	V-2
Dimensions	1193 mm x 660 mm x 820 mm (47 in. x 26.0 in. x 32.3 in.)
Engine Manufacturer/Description	KOHLER
Engine Model	CH1006
Engin/Alternator RPM	3600
Fuel Type	Natural Gas LPG
Frequency	60 Hz
Phase	Single Phase
Voltage @60 Hzs	120/240
Digital Voltage Regulation	±1.0%
Built in Mounting pad	Yes

Technical Documents

Accessories & Controllers

Designed for style, performance and accessibility, these are the accessories that make the ordinary extraordinary



Automatic Paralleling Module, 200A

Installation

Residential/Commercial Generator Sets



Models:

14RCA
14RCAL
20RCA
20RCAL
26RCA
26RCAL

Controller:

RDC2

KOHLER®

TP-7091 4/23d

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Table of Contents

Safety Precautions and Instructions	5
Introduction	11
Service Assistance	13
Section 1. Location and Mounting	15
1.1 Introduction	15
1.2 Lifting.....	16
1.3 Generator Set Inspection	17
1.4 Location and Mounting	17
1.4.1 Mounting Area.....	17
1.4.2 Exhaust Requirements.....	18
1.5 Dimension Drawings	18
1.6 Access the Air Intake Area	19
Section 2. Fuel	21
2.1 Fuel Requirements	21
2.1.1 Fuel Supply	21
2.1.2 Fuel Pipe Size.....	22
2.1.3 Connecting the Fuel Supply	23
2.2 Fuel Conversion	24
2.2.1 Fuel Conversion, Original Fuel System, 14RCA/L	25
2.2.2 Fuel Conversion, Original Fuel System, 20RCA/L	27
2.2.3 Fuel Conversion, Revised Fuel System, 14/20/26RCA/L.....	28
Section 3. Electrical	31
3.1 Electrical Connections.....	31
3.1.1 Wire Selection.....	31
3.1.2 Grounding	32
3.1.3 Electrical Lead Entry	33
3.1.4 Field Connections	34
3.1.5 AC Power Supply.....	36
3.2 Battery.....	37
3.3 ATS and Accessory Communication Connections	39
3.3.1 Communication Cable Specifications.....	39
3.3.2 Transfer Switch Connection	40
3.3.3 System Connections with Accessory Modules.....	41
Section 4. Prestart	45
4.1 Prestart Installation Check	45
4.2 Set the Exerciser	46
4.2.1 Setting the Exerciser.....	46
4.2.2 Loaded Exercise	46
Section 5. Accessories	47
5.1 Introduction	47
5.2 Carburetor Heater	47
5.3 Programmable Interface Module (PIM)	50
5.4 OnCue Plus Generator Management System	51
5.5 Load Management Devices.....	52
5.5.1 Power Relay Module.....	53
5.6 PowerSync Automatic Paralleling Module (APM).....	53

1.3 Generator Set Inspection

Complete a thorough inspection of the generator set.

Check for the following:

1. Inspect the generator set for loose or damaged parts or wires. Repair or tighten any loose parts before installation.
2. Check the engine oil. Fill, if necessary, with the recommended viscosity and grade of oil. Use synthetic oil, API (American Petroleum Institute) Service Class SG or higher. See the Operation Manual for additional information.

1.4 Location and Mounting

- Install the generator set outdoors near the incoming gas service. The generator set location must allow easy access for maintenance and service. The required distance from a structure is dependent on state and local codes. See the dimension drawing in the **Drawings and Diagrams** section for the minimum clearance from structures and non-combustible materials.

Locate the generator set so that the hot exhaust does not blow on plants or other combustible materials. No plants, shrubs, or other combustible materials are allowed within 1.2 m (4 ft.) of the exhaust end of the generator set.

- Do not install the generator set where exhaust gas could accumulate and seep inside or be drawn into a potentially occupied building. Furnace and other similar intakes must be at least 3 m (10 ft.) from the exhaust end of the generator set.

WARNING

DO NOT locate the generator set near patios, decks, play areas, or animal shelters. Keep items such as lawn furniture, toys, sports equipment, and all combustible materials away from the generator set exhaust outlet.

Remind family members, children, and visitors to use caution near the generator set. Generator sets connected to automatic transfer switches start automatically during exercise periods and power outages. Some generator set components become hot when the generator set is running and remain hot for a time after the generator set shuts down.

1.4.1 Mounting Area

Prepare the generator set mounting area. The mounting area must:

- 1. Provide a flat, level surface for the generator set.
- 2. Allow easy access for maintenance and service.
- 3. Support the weight of the generator set with related equipment, such as the battery and mounting pad.
- 4. Support the generator set weight for the lifetime of the generator set.
- 5. Meet applicable building codes.
- 6. Not be subject to flooding.

Clear all combustible materials, including plants and shrubs, building materials, and lawn furniture, from an area at least 1.2 m (4 ft.) beyond the exhaust end of the generator set. See the dimension drawing in the **Drawings and Diagrams** section.

The generator set is shipped on an aluminum base. Set the base directly on the mounting area or on an optional concrete mounting pad.

1.4.2 Exhaust Requirements

Figure 5 gives the exhaust temperature at rated load. The engine exhaust mixes with the generator set cooling air at the exhaust end of the enclosure. Mount the generator set so that the hot exhaust does not blow on plants or other combustible materials. Maintain the clearances shown in the dimension drawing.

Exhaust	Temperature, °C (°F)
Exhaust gas exiting the enclosure at rated kW, °C (°F)	260 (500)

Figure 5 Exhaust Flow and Temperature

The generator set requires correct air flow for cooling and combustion. The inlet and outlet openings in the sound enclosure provide the cooling and combustion air. Figure 6 shows the locations of the cooling air intake and exhaust vents. Inspect the air inlet and outlet openings inside and outside the enclosure to ensure that the air flow is not blocked.

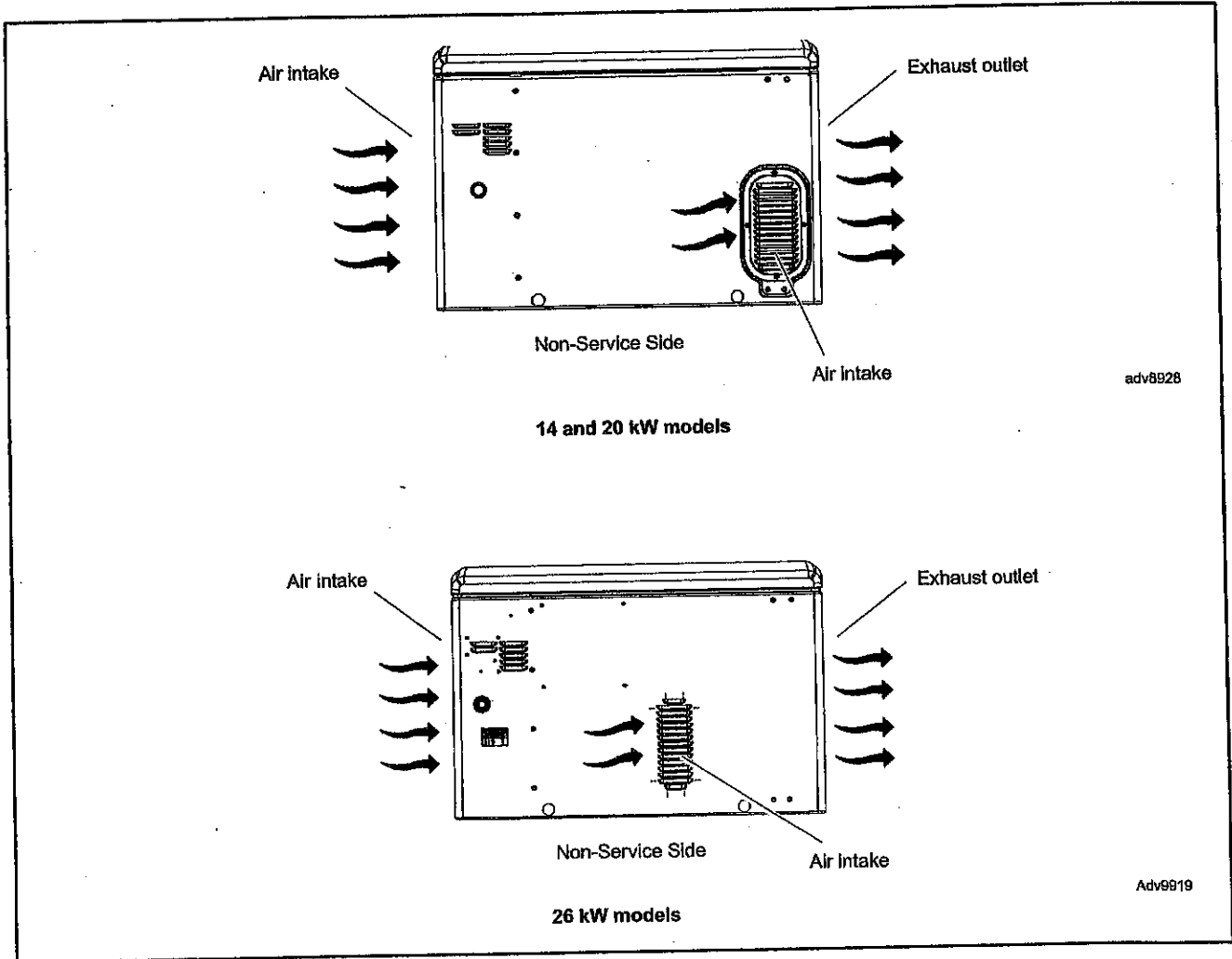


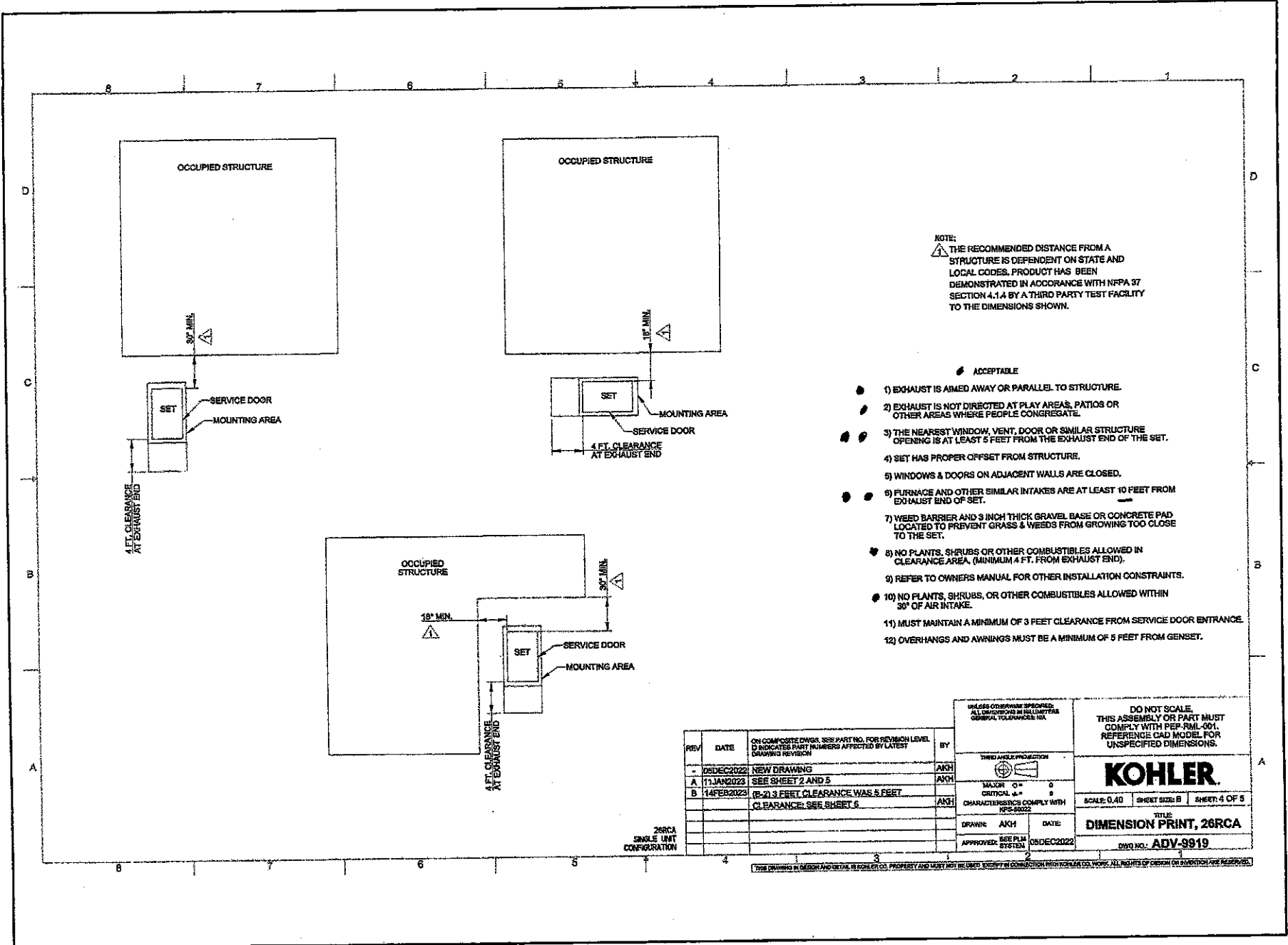
Figure 6 Cooling Air Intake and Exhaust

1.5 Dimension Drawings

See the dimension drawings in the **Drawings and Diagrams** section for the generator set dimensions, fuel and electric inlet locations, and recommended clearance.

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Figure 70 Dimension Drawing, 26RCAL, ADV-9919 Sheet 4



NOTE:
 ▲ THE RECOMMENDED DISTANCE FROM A STRUCTURE IS DEPENDENT ON STATE AND LOCAL CODES. PRODUCT HAS BEEN DEMONSTRATED IN ACCORDANCE WITH NFPA 97 SECTION 4.1.4 BY A THIRD PARTY TEST FACILITY TO THE DIMENSIONS SHOWN.

- ACCEPTABLE
- 1) EXHAUST IS AIMED AWAY OR PARALLEL TO STRUCTURE.
- 2) EXHAUST IS NOT DIRECTED AT PLAY AREAS, PATIOS OR OTHER AREAS WHERE PEOPLE CONGREGATE.
- 3) THE NEAREST WINDOW, VENT, DOOR OR SIMILAR STRUCTURE OPENING IS AT LEAST 5 FEET FROM THE EXHAUST END OF THE SET.
- 4) SET HAS PROPER OFFSET FROM STRUCTURE.
- 5) WINDOWS & DOORS ON ADJACENT WALLS ARE CLOSED.
- 6) FURNACE AND OTHER SIMILAR INTAKES ARE AT LEAST 10 FEET FROM EXHAUST END OF SET.
- 7) WEED BARRIER AND 3 INCH THICK GRAVEL BASE OR CONCRETE PAD LOCATED TO PREVENT GRASS & WEEDS FROM GROWING TOO CLOSE TO THE SET.
- 8) NO PLANTS, SHRUBS OR OTHER COMBUSTIBLES ALLOWED IN CLEARANCE AREA. (MINIMUM 4 FT. FROM EXHAUST END).
- 9) REFER TO OWNERS MANUAL FOR OTHER INSTALLATION CONSTRAINTS.
- 10) NO PLANTS, SHRUBS, OR OTHER COMBUSTIBLES ALLOWED WITHIN 30" OF AIR INTAKE.
- 11) MUST MAINTAIN A MINIMUM OF 3 FEET CLEARANCE FROM SERVICE DOOR ENTRANCE.
- 12) OVERHANGS AND AWNINGS MUST BE A MINIMUM OF 5 FEET FROM GENSET.

REV	DATE	ON COMPOSITE DWGS. SEE PART NO. FOR REVISION LEVEL. 0 INDICATES PART NUMBERS AFFECTED BY LATEST DRAWING REVISION	BY
-	05DEC2022	NEW DRAWING	AKH
A	11JAN2023	SEE SHEET 2 AND 5	AKH
B	14FEB2023	(B-2) 3 FEET CLEARANCE WAS 5 FEET. CLEARANCE: SEE SHEET 6	AKH

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN MILLIMETERS GENERAL TOLERANCES: N/A		DO NOT SCALE THIS ASSEMBLY OR PART MUST COMPLY WITH PEP-RML-001. REFERENCE CAD MODEL FOR UNSPECIFIED DIMENSIONS.	
THREE ANGLE PROJECTION		KOHLER	
MAJOR 0° 0'	CRITICAL 0° 0'	SCALE: 0.40	SHEET SIZE: B
CHARACTERISTICS COMPLY WITH NPS-2022		SHEET: 4 OF 5	
DRAWN: AKH	DATE: 05DEC2022	TITLE: DIMENSION PRINT, 26RCA	
APPROVED: SEE PLM SYSTEM		DWG NO.: ADV-9819	

26RCA
 SINGLE UNIT
 CONFIGURATION

THIS DRAWING IS UNLESS AND UNTIL IS FOR CLIENT'S PROPERTY AND MUST NOT BE REPRODUCED EXCEPT IN CONNECTION WITH FORMER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

EXHIBIT
#4

3.a.3.a



turn to the experts

THIS BOOKLET CONTAINS IMPORTANT INFORMATION

INSTALLER: USE THE INFORMATION IN THIS BOOKLET TO INSTALL THE APPLIANCE AND AFFIX THIS BOOKLET ADJACENT TO THE APPLIANCE AFTER INSTALLATION.

USER: KEEP THIS BOOKLET OF INFORMATION FOR FUTURE REFERENCE.

SERVICER: USE THE INFORMATION IN THIS BOOKLET TO SERVICE THE APPLIANCE AND AFFIX THE BOOKLET ADJACENT TO THE APPLIANCE AFTER SERVICING.

LITERATURE ASSEMBLY BOOKLET NO.: **346039-701**

Cover Page P/N 346039-201

MODEL 59TN6B

Carrier Corporation
7310 W. Morris Street
Indianapolis, IN 46231 U.S.A.



346039-701 REV A

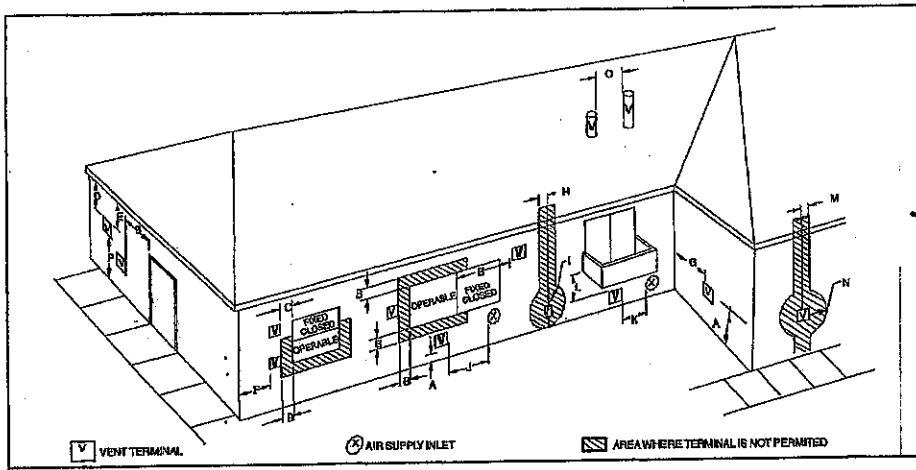


Printed on recycled paper.

NOTE TO INSTALLER: this manual must be left with the equipment owner.

Packet Pg. 23

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)



A12325

Fig. 45 - Ventilated Combustion Air and Non-Direct Vent Termination Clearance

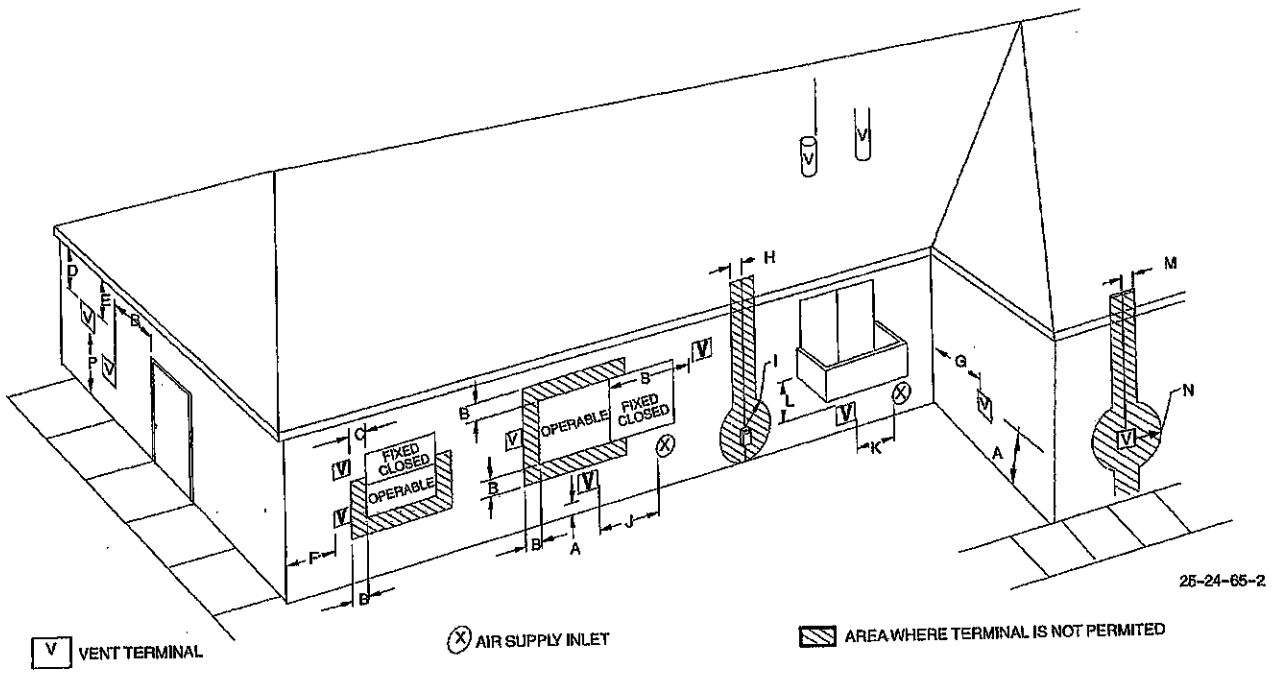
NOTE: The following is based upon National codes for gas appliances and is provided as a reference. Refer to local codes which may supersede these standards and/or recommendations.

Item	Clearance Description	Canadian Installations (1) (per CAN/CSA B149.1)	U.S. Installations (2) (per ANSI Z223.1/NFPA 54)
A	Clearance above grade, veranda, porch, deck, balcony or anticipated snow level	12 in. (305 mm) 18 in. (457 mm) above roof surface.	12 in. (305 mm)
B	Clearance to a window or door that may be opened	12 in. (305 mm) for appliances >10,000 Btuh (3 kW) and <= 100,000 Btuh (30 kW), 36 in. (914 mm) for appliances >100,000 Btuh (30 kW)	4ft. (1.2M) below or to the side of the opening, 1 ft (.3M) above the opening. Manufacturer's Recommendation: See Note 8.
C	Clearance to a permanently closed window		
D	Vertical clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the centerline of the terminal	For clearances not specified in ANSI Z223.1/NFPA 54 or CAN/CSA B149.1, clearances shall be in accordance with local installation codes and the requirements of the gas supplier and the manufacturer's installation instructions. Manufacturer's Recommendation: See Notes 3-8.	
E	Clearance to an unventilated soffit		
F	Clearance to an outside corner		
G	Clearance to an inside corner		
H	Clearance to each side of the centerline extended above electrical meter or gas service regulator assembly		
	Clearance to service regulator vent outlet	3ft. (.9 M)	See Note 4.
	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	12 in. (305 mm) for appliances >10,000 Btuh (3 kW) and <= 100,000 Btuh (30 kW), 36 in. (914 mm) for appliances >100,000 Btuh (30 kW)	4ft. (1.2M) below or to the side of the opening, 1 ft (.3M) above the opening. Manufacturer's Recommendation: See Note 8
	Clearance to a mechanical air supply inlet	6 ft. (1.8 M)	3ft. (.9 M) above if within 10 ft. (3 M) horizontally
	Clearance under a veranda, porch, deck, or balcony	12 in. (305 mm). Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.	See Note 4. Manufacturer's Recommendation: See Notes 3-8.
	Clearance to each side of the centerline extended above or below vent terminal of the furnace to a dryer or water heater vent, or other appliance's direct vent intake or exhaust	12 in. (305 mm)	12 in. (305 mm)
	Clearance to a moisture exhaust duct (dryer vent, spa exhaust, etc.)	12 in. (305 mm) See Note 4	12 in. (305 mm) See Note 4
	Clearance from a plumbing vent stack	3 ft. (.9 M)	3 ft. (.9 M)
	Clearance above paved sidewalk or paved driveway located on public property	7 ft. (2.1 M). Vent shall not terminate above a sidewalk or paved driveway that is located between two single-family dwellings and serves both dwellings.	7ft. (2.1M)

greater than, > greater than or equal to, <= less than, < less than or equal to

- In accordance with the current CAN/CSA B149.1, Natural Gas and Propane Installation Code.
- In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code
- NOTE: This table is based upon National codes for gas appliances, and are provided as a reference. Refer to Local codes which may supersede these standards and/or recommendations.
- For clearances not specified in ANSI Z223.1/NFPA 54 or CAN/CSA B 149.1, clearances shall be in accordance with local installation codes and the requirements of the gas supplier and the manufacturer's installation instructions.
- When locating vent terminations, consideration must be given to prevailing winds, location, and other conditions which may cause recirculation of the combustion products of adjacent vents. Recirculation can cause poor combustion, inlet condensation problems, vent termination icing, and/or accelerated corrosion of the heat exchangers.
- Design and position vent outlets to avoid ice build-up on and moisture damage to surrounding surfaces.
- The vent for this appliance shall not terminate:
 - Near soffit vents or crawl space vents or other areas where condensate or vapor could create a nuisance or hazard or property damage; or
 - Where condensate vapor could cause damage or could be detrimental to the operation of regulators, relief valves, or other equipment.
- These National standards apply to all non-direct-vent gas appliances. Contact Local code officials for additional requirements and/or exclusions.

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)



V VENT TERMINAL

X AIR SUPPLY INLET

AREA WHERE TERMINAL IS NOT PERMITTED

Item	Clearance Description	Canadian Installation (1)	U.S. Installation (2)
A	Clearance above grade, veranda, porch, deck, balcony or anticipated snow level	12 in. (305 mm), 18 in. (457 mm) above roof surface.	12 in. (305 mm)
B	Clearance to a window or door that may be opened	6 in. (152 mm) for appliances $\leq 10,000 \text{ Btuh (3kW)}$ 12 in. (305 mm) for appliances > 10,000 Btuh (3kW), and $\leq 100,000 \text{ Btuh (30kW)}$, and $\leq 100,000 \text{ Btuh (30 kW)}$	4 ft. (1.2 M) below or to the side of the opening. 1 ft. (.3 M) above the opening.
C	Clearance to a permanently closed window		
D	Vertical clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the centerline of the terminal	For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, clearances shall be in accordance with local installation codes and the requirements of the gas supplier and the manufacturer's installation instructions.	For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, clearances shall be in accordance with local installation codes and the requirements of the gas supplier and the manufacturer's installation instructions.
E	Clearance to an unventilated soffit		
F	Clearance to an outside corner		
G	Clearance to an inside corner		
H	Clearance to each side of the centerline extended above electrical meter or gas service regulator assembly	3 ft. (.9 M) within 15 ft. (4.6 M) above the meter/regulator assembly	3 ft. (.9 M) within 15 ft. (4.6 M) above the meter/regulator assembly.
I	Clearance to service regulator vent outlet	3 ft. (.9 M)	* 3 ft. (.9 M) * For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, clearances shall be in accordance with local installation codes and the requirements of the gas supplier and the manufacturer's installation instructions.
J	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	6 in. (152 mm) for appliances $\leq 10,000 \text{ Btuh (3kW)}$ 12 in. (305 mm) for appliances > 10,000 Btuh (3kW), and $\leq 100,000 \text{ Btuh (30kW)}$, and $\leq 100,000 \text{ Btuh (30 kW)}$	4 ft. (1.2 M) below or to the side of the opening. 1 ft. (.3 M) above the opening.
K	Clearance to a mechanical air supply inlet	6 ft. (1.8 M)	3 ft. (.9 M)
L	Clearance under a veranda, porch, deck, or balcony	12 in. (305 mm). Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.	For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, clearances shall be in accordance with local installation codes and the requirements of the gas supplier and the manufacturer's installation instructions.
M	Clearance to each side of the centerline extended above or below vent terminal of the furnace to a dryer or water heater vent, or other appliance's direct vent intake or exhaust	12 in. (305 mm)	12 in. (305 mm)
N	Clearance to the vent terminal of a dryer vent, water heater vent, or other appliances direct vent intake or exhaust	3 ft. (.9 M)	3 ft. (.9 M)
O	Clearance from a plumbing vent stack	3 ft. (.9 M)	3 ft. (.9 M)
P	Clearance above paved sidewalk or paved driveway located on public property	7 ft. (2.1 M). A vent shall not terminate above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.	7 ft. (2.1 M).

(1) In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code.
 (2) In accordance with the current ANSI Z223.1, NFPA 54, National Fuel Gas Code

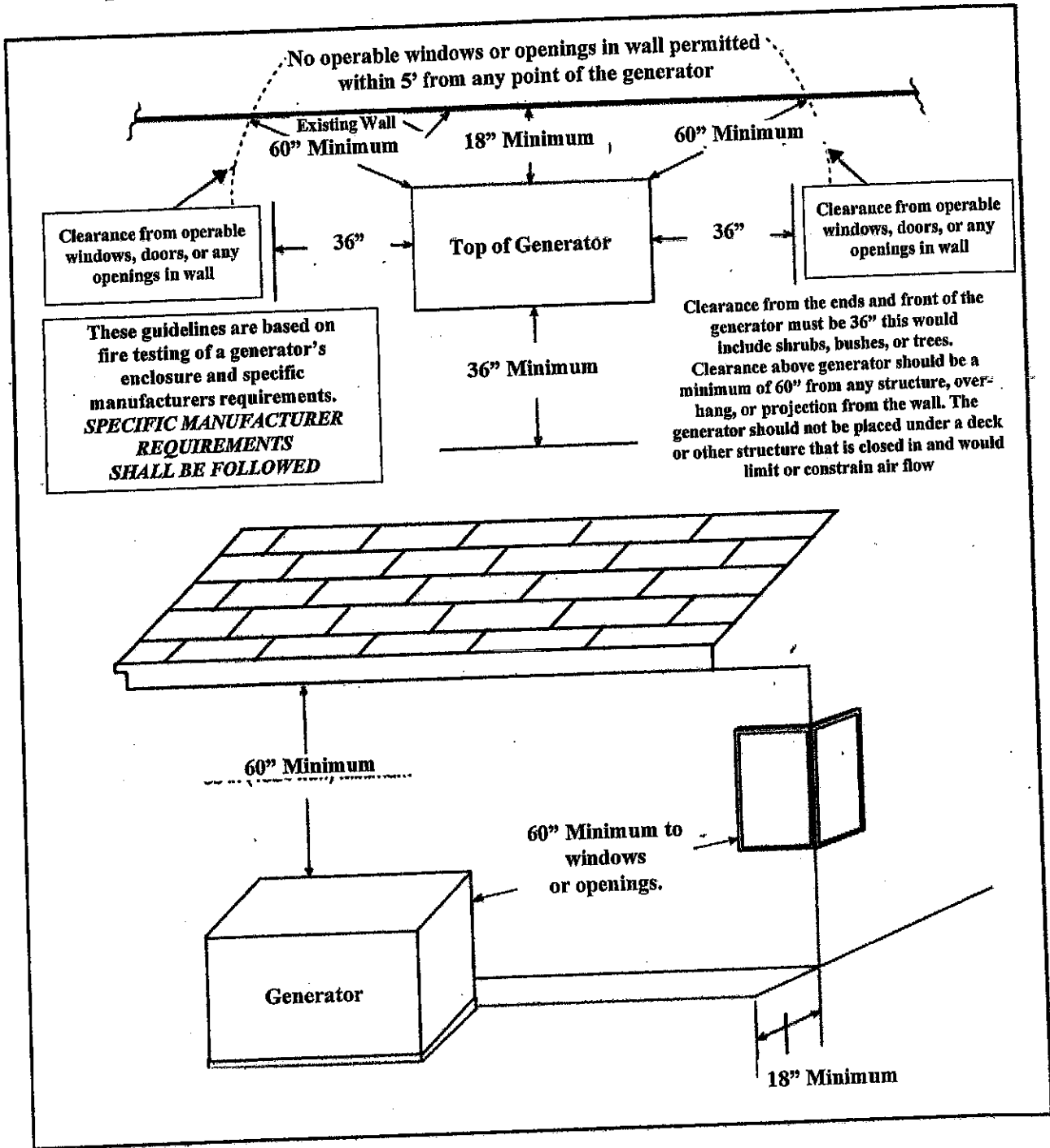
- Notes:
- The vent for this appliance shall not terminate:
 - Over public walkways; or
 - Near soffit vents of crawl space vents or other areas where condensate or vapor could create a nuisance or hazard or property damage; or
 - Where condensate vapor could cause damage or could be detrimental to the operation of regulators, relief valves, or other equipment.
 - When locating vent terminations, consideration must be given to prevailing winds, location, and other conditions which may cause recirculation of the combustion products of adjacent vents. Recirculation can cause poor combustion, inlet condensate problems, and accelerated corrosion of the heat exchangers.
 - Avoid venting under a deck or large overhang. Recirculation could occur and cause performance or system problems.

A11047

Fig. 46 - Ventilated Combustion Air and Non-Direct Vent Termination Clearance

EXHIBIT #5

Typical setback requirements are outlined below,
- **Specific Manufacturer Installation Requirements Shall be followed-**



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Exhibit
#6

Original West Side
ELEVATION DRAWING
PER Waldemar Lange,
Architect

3.a.3.a



-(3) MARVIN
Double-hung windows
w/combination
wood stoems
(original
wood windows)
REMAIN

Now:
- Full Bay Restoration
- MARVIN-CLAD
DBL-hung windows
w/combination
CLADDING

Basement
Vented
window-well ELEVATION

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Exhibit
#7

Search topics, products

What Should I Know About Clearance Requirements When Installing My Generator?

🕒 Jun 21, 2024 · Knowledge

- Always check local codes as those will trump these recommendations.
- Do NOT install a home standby generator under a wooden deck or platform.
- Units that do not feature the SwRI logo must be installed 5 ft. from combustible materials and 3 ft. from non-combustible materials.

Home Standby Generator Clearance Requirements

Clearance requirements ensure the generator is operated at a safe distance where heat and fumes will not cause fires or health hazards. The exhaust gets extremely hot and remains hot after shutdown. Flammable material may ignite and burn from the heat of the exhaust system.

* NFPA 37 Overview

- The National Fire Protection Association's standard for the installation and use of stationary generators.

- Its requirements limit the spacing of the generator from a structure or wall.
- The unit must be located where it's readily accessible for maintenance, repair, and first responders.
- Minimum clearance requirements are for adequate airflow, maintenance, and safety.

NFPA 37 Requirements

For a complete and updated list, see the NFPA 37 web page (<https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=37>).

- * • 5ft. from openings in walls (operable windows, doors, vents, window wells, or openings in the wall).
- 18 in. of clearance from the back of the generator to a stationary wall or building (based on testing done by the Southwest Research Institute or SwRI).
- 5 ft. of clearance above the generator.
- * • 3 ft. of clearance at the front and both ends. This includes trees, shrubs, and bushes. Vegetation not in compliance could obstruct airflow and exhaust fumes could inhibit plant growth.
- * • In addition to these requirements, verify all potential for water intrusion is directed away from the generator enclosure: sprinklers, roof run-off, down spouts, and sump pump discharge.

Site selection and preparation

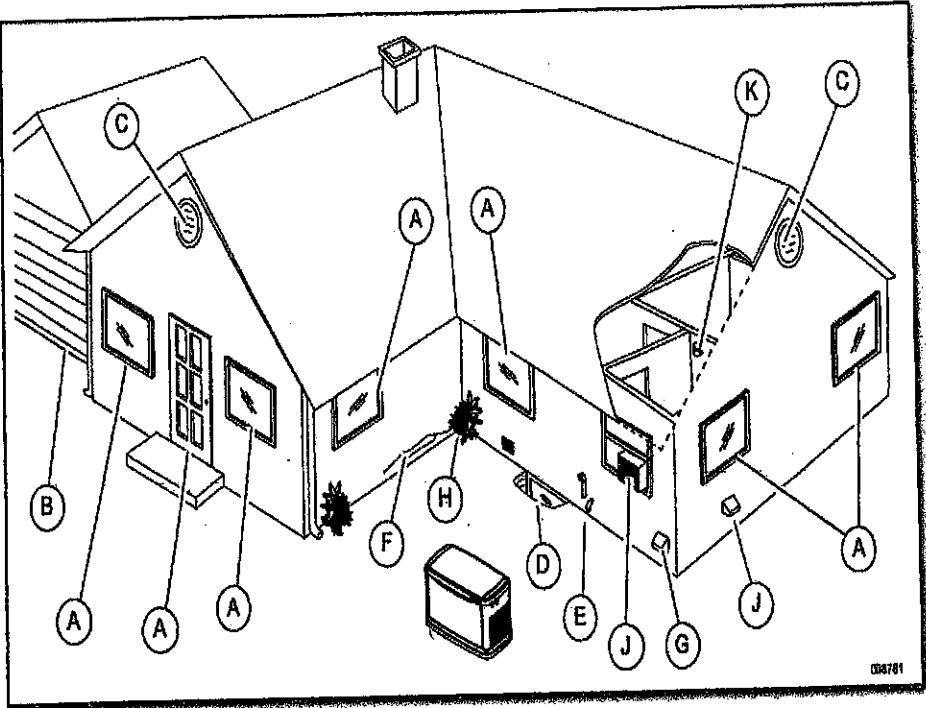
Potential CO entry points

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Generator exhaust can enter a structure through large openings, such as windows and doors. However, exhaust and CO can also seep into the structure through smaller, less obvious openings.

Protect the structure

Verify the structure itself as correctly caulked and sealed to prevent air from leaking in or out. Voids, cracks, or openings around windows, doors, soffits, pipes, and vents can allow exhaust gas to be drawn into the structure. Some examples of entry points are described and included in, but not limited to, the accompanying table.



ID	Entry Point	Description / Comments
A	Windows and doors	Architectural details which can be (or are) opened to admit fresh air into the structure.
B	Garage door	CO can leak into garage if door is open, or does not seal correctly when closed.
C	Attic vent	Attic vents, ridge vents, crawl space vents, and soffit vents can all admit generator exhaust.
D	Basement windows	Windows or hatches allowing ventilation to or from lower level of a structure.
E	Furnace intake / exhaust vent	Air intake and exhaust pipes for furnace.
F	Wall cracks	Includes (but not limited to) cracks in wall, foundation, mortar, or air gaps around doors, windows, and pipes. See <i>Protect the Structure</i> .
G	Dryer vent	Exhaust duct for clothes dryer.
H	Airflow restrictions	Structural features, including but not limited to: corners, alcoves, fences, courtyards, and areas with heavy vegetation can restrict correct airflow around unit. Exhaust gases can be collected in these areas.
J	HVAC components	Do not direct generator discharge into HVAC components, including but not limited to: make up air systems, AC condensers, and window AC units. IMPORTANT NOTE: Mechanical and gravity outdoor air intake openings for HVAC supply air systems shall be located according to Section 401 in the ICC Mechanical Code. See ICC Mechanical Code for any additional requirements.

What about other requirements and codes?

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Codes vary by region - Contact your local building inspection department. This department can usually be contacted through your local city government web site.

Permitting varies by region - This includes the time frame to receive a permit, what permits must be pulled, and the costs of the permits. See [What factors influence the cost of installing a home standby system? \(/s/article/How-Much-Does-the-Installation-of-a-Home-Standby-Generator-Typically-Cost\)](#)

Plumbing and electrical - Generator installation involves plumbing and electrical work. This should be performed by experienced professionals. We recommend contacting a local certified dealer: [How Can I Find a Generac Service Dealer in My Area? \(/s/article/How-Can-I-Find-a-Generac-Service-Dealer-in-My-Area\)](#)

Further information, such as the distance from the gas meter, can be found in the installation manuals. See the [How Do I Find a Copy of My Home Standby Generator Owner's Manual, Spec Sheets, or Installation Manual? \(/s/article/How-Do-I-Find-a-Copy-of-My-Home-Standby-Generator-Owner-s-Manual-and-Spec-Sheets\)](#) article for more information. Note that local codes should always be followed.

Safety Precautions and Instructions

INSTRUCTIONS. Electromechanical equipment, including generator sets, transfer switches, switchgear, cause bodily harm and pose life-threatening danger when improperly installed, operated, or maintained. Be aware of potential dangers and act safely. Read and follow all safety precautions and instructions.

SAVE THESE INSTRUCTIONS.

This manual has several types of safety precautions and instructions: Danger, Warning, Caution, and Notice.



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Safety decals affixed to the equipment in prominent places alert the operator or service technician to potential hazards and explain how to act safely. The decals are shown throughout this publication to improve operator recognition. Replace missing or damaged decals.





• **Accidental Starting**

	<p>Accidental starting. Can cause severe injury or death.</p>
	<p>Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.</p>

Disabling the generator set. Accidental starting can cause severe injury or death. Before working on the generator set or equipment connected to the set, disable the generator set as follows: (1) Press the generator set off/reset button to shut down the generator set. (2) Disconnect the power to the battery charger, if equipped. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent the starting of the generator set by the remote start/stop switch.

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Battery

 WARNING	Sulfuric acid in batteries. Can cause severe injury or death.
	Wear protective goggles and clothing. Battery acid may cause blindness and burn skin.
 WARNING	Explosion. Can cause severe injury or death. Relays in the battery charger cause arcs or sparks.
	Locate the battery in a well-ventilated area. Isolate the battery charger from explosive fumes.



Battery electrolyte is a diluted sulfuric acid. Battery acid can cause severe injury or death. Battery acid can cause blindness and burn skin. Always wear splashproof safety goggles, rubber gloves, and boots when servicing the battery. Do not open a sealed battery or mutilate the battery case. If battery acid splashes in the eyes or on the skin, immediately flush the affected area for 15 minutes with large quantities of clean water. Seek immediate medical aid in the case of eye contact. Never add acid to a battery after placing the battery in service, as this may result in hazardous spattering of battery acid.

Battery acid cleanup. Battery acid can cause severe injury or death. Battery acid is electrically conductive and corrosive. Add 500 g (1 lb.) of bicarbonate of soda (baking soda) to a container with 4 L (1 gal.) of water and mix the neutralizing solution. Pour the neutralizing solution on the spilled battery acid and continue to add the neutralizing solution to the spilled battery acid until all evidence of a chemical reaction (foaming) has ceased. Flush the resulting liquid with water and dry the area.

Battery gases. Explosion can cause severe injury or death. Battery gases can cause an explosion. Do not smoke or permit flames or sparks to occur near a battery at any time, particularly when it is charging. Do not dispose of a battery in a fire. To prevent burns and sparks that could cause an explosion, avoid touching the battery terminals with tools or other metal objects. Remove all jewelry before servicing the equipment. Discharge static electricity from your body before touching batteries by first touching a grounded metal surface away from the battery. To avoid sparks, do not disturb the battery charger connections while the battery is charging. Always turn the battery charger off before disconnecting the battery connections. Ventilate the compartments containing batteries to prevent accumulation of explosive gases.

Battery short circuits. Explosion can cause severe injury or death. Short circuits can cause bodily injury and/or equipment damage. Disconnect the battery before generator set installation or maintenance. Remove all jewelry before servicing the equipment. Use tools with insulated handles. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery. Never connect the negative (-) battery cable to the positive (+) connection terminal of the starter solenoid. Do not test the battery condition by shorting the terminals together.

Engine Backfire/Flash Fire



 WARNING	<p>Risk of fire. Can cause severe injury or death. Do not smoke or permit flames or sparks near fuels or the fuel system.</p>
	

Servicing the fuel system. A flash fire can cause severe injury or death. Do not smoke or permit flames or sparks near the carburetor, fuel line, fuel filter, fuel pump, or other potential sources of spilled fuels or fuel vapors. Catch fuels in an approved container when removing the fuel line or carburetor.

Servicing the air cleaner. A sudden backfire can cause severe injury or death. Do not operate the generator set with the air cleaner removed.

Combustible materials. A fire can cause severe injury or death. Generator set engine fuels and fuel vapors are flammable and explosive. Handle these materials carefully to minimize the risk of fire or explosion. Equip the compartment or nearby area with a fully charged fire extinguisher. Select a fire extinguisher rated ABC or BC for electrical fires or as recommended by the local fire code or an authorized agency. Train all personnel on fire extinguisher operation and fire prevention procedures.

Exhaust System

 WARNING	<p>Carbon monoxide. Can cause severe nausea, fainting, or death. The exhaust system must be leakproof and routinely inspected.</p>
	

Generator set operation. Carbon monoxide can cause severe nausea, fainting, or death. Carbon monoxide is an odorless, colorless, tasteless, nonirritating gas that can cause death if inhaled for even a short time. Avoid breathing exhaust fumes when working on or near the generator set. Never operate the generator set inside a building unless the exhaust gas is piped safely outside. Never operate the generator set where exhaust gas could accumulate and seep back inside a potentially occupied building.

Carbon monoxide detectors. Carbon monoxide can cause severe nausea, fainting, or death. Install carbon monoxide detectors on each level of any building adjacent to the generator set. Locate the detectors to adequately warn the building's occupants of the presence of carbon monoxide. Keep the detectors operational at all times. Periodically test and replace the carbon monoxide detectors according to the manufacturer's instructions.

Carbon monoxide symptoms. Carbon monoxide can cause severe nausea, fainting, or death. Carbon monoxide is a poisonous gas present in exhaust gases. Carbon monoxide is an odorless, colorless, tasteless, nonirritating gas that can cause death if inhaled for even a short time. Carbon monoxide poisoning symptoms include but are not limited to the following:

- Light-headedness, dizziness
- Physical fatigue, weakness in joints and muscles
- Sleepiness, mental fatigue, inability to concentrate or speak clearly, blurred vision
- Stomachache, vomiting, nausea

If experiencing any of these symptoms and carbon monoxide poisoning is possible, seek fresh air immediately and remain active. Do not sit, lie down, or fall asleep. Alert others to the possibility of carbon monoxide poisoning. Seek medical attention if the condition of affected persons does not improve within minutes of breathing fresh air.

Photo
#1

Springthaw

3.a.3.a



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#2



Watershed-Drainage
 - Spring Rainfall and saturated soil
 - FROM (W) CULVERT PIPE
 - FROM (N) CULVERT PIPE

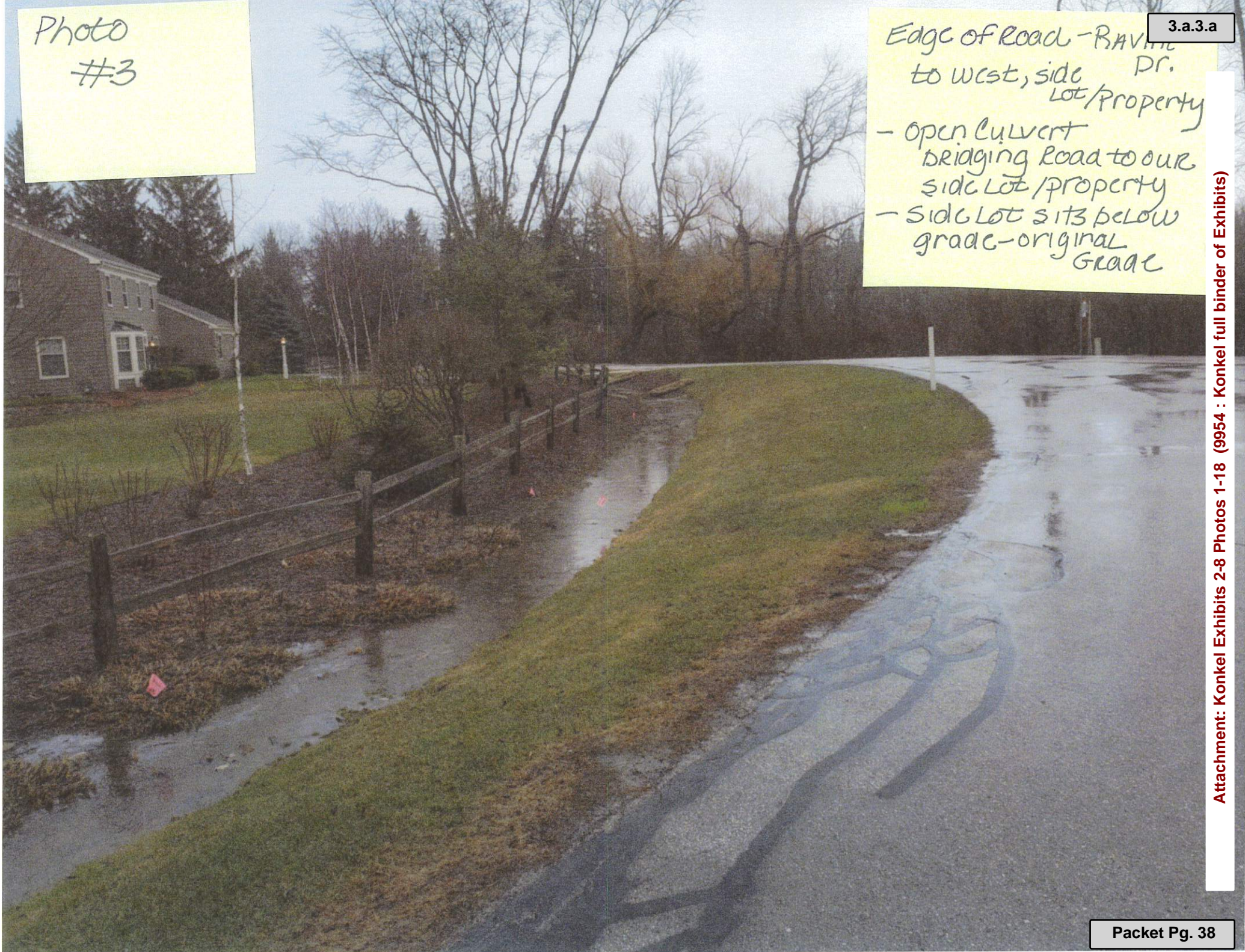
Attachment: Konkell Exhibits 2-8 Photos 1-18 (9954 : Konkell full binder of Exhibits)

Photo
#3

3.a.3.a

Edge of Road - Ravine
to west, side Dr.
Lot/Property

- Open Culvert
bridging Road to our
side Lot/Property
- Side Lot sits below
grade - original
Grade



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#4

Facing: (S)
Draining under
Pavine Drive
to our (S)
Property

Water Drainage
from (S) Buried
culvert pipe
- FROM VIRMOND
PARK to our (S)
Property

3.a.3.a

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#5

Facing:
(N)
along our (E)
Property

3.a.3.a

Encroachment
(PER City of Mequon)
- Storm water outflow
onto our property
- Drains under road
connected to
catch-basin
at property to the
east

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#6

Looking
toward (NW)
Corner of our
Lot - Property

North - Fence
Property Line
Pitch (W) to (E)

3.a.3.a



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#7

3.a.3.a

WEST
Side
Pitch (S) to (N)

ALSO:
WELL SERVICE
area



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#8

3.a.3.a

West House
Elevation

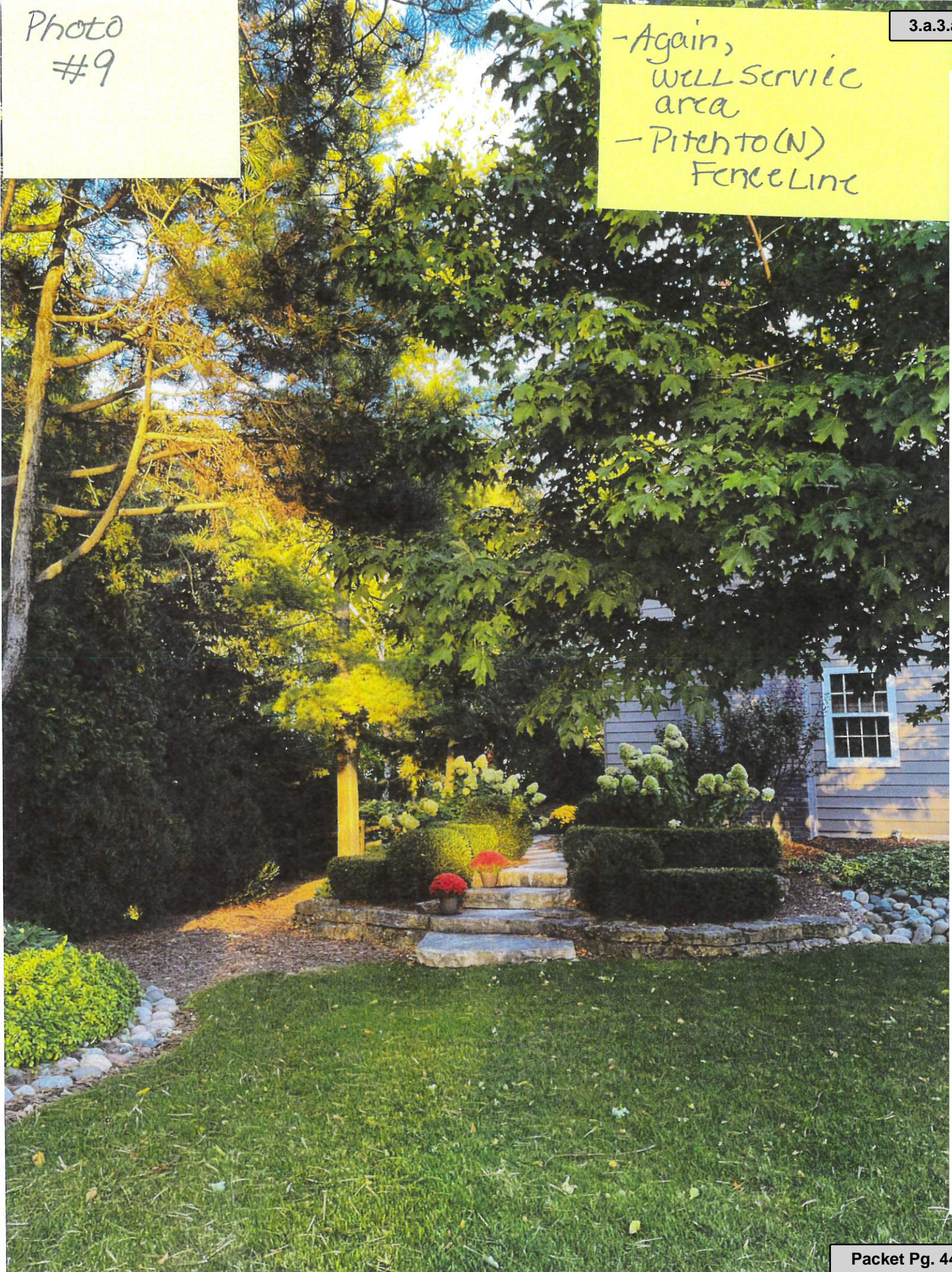
- Slopping Bed
- Open Downspout
drains along
Garden Bed
perimeter
to fence

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#9

3.a.3.a

- Again,
WELL SERVICE
area
- Pitch to (N)
FENCE LINE



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#10

Looking (SE)
Vermont Park
across
Ravine Dr.

Generator
- Placement
in garden Bed

3.a.3.a



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo #11

Looking (E)

Edge of Road to property line to generator

3.a.3.a



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

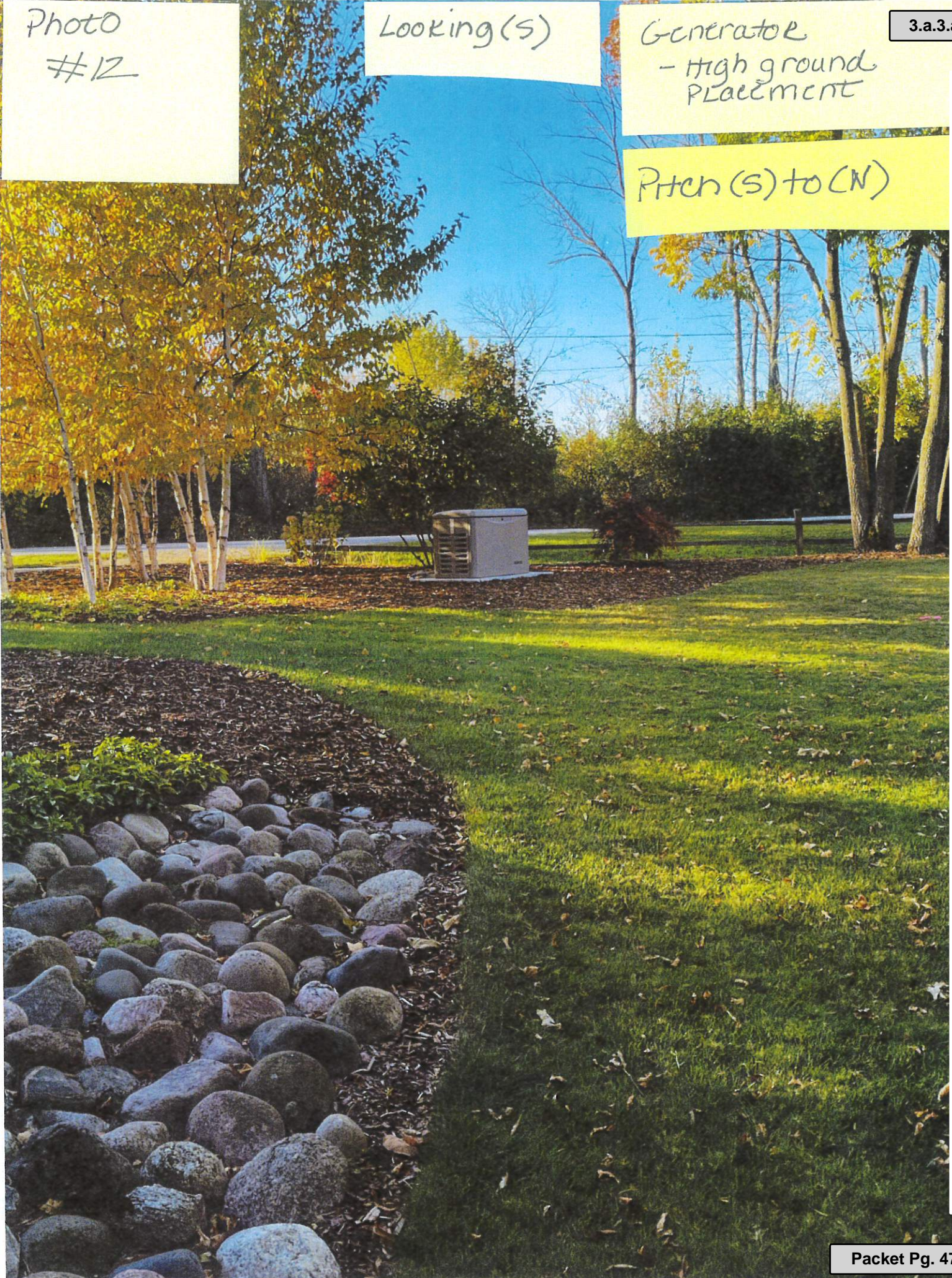
Photo
#12

Looking(s)

Generator
- High ground
Placement

3.a.3.a

Pitch (s) to (N)



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
13

Generator
- Street View

3.a.3.a

NEWLY
Planted
- (2) Japanese
Maples -
"Blood Dragon
(5) of Generator

ALSO: WELL
- Service Pathway
between (SW)
corner of house
and
Beech Garden Bed

Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#14

WEST SIDE HOUSE 3.a.3.a

- Partial Elevation
- Slopping Bed
- Pitched Lot to (NE) CORNER OF house-to-fence



WEST SIDE UTILITIES

(N) of chimney:

- A/C unit CONTROL BOX
- Furnace Exhaust Vent
- Fresh air intake

(W) of chimney:

- WELL PIPE

(S) of chimney:

- WELL water Line
- secondary ground
- Back flow preventer
- Irrigation Supply Line
- Cable Spectrum
- AT&T Landline
- Electric meter
- ELECTRIC LINE feeding TO METER from WEST
- Abandoned ELECTRIC LINE TO (S) property
- ELECTRIC to generator
- Gas Meter
- Gas Line supply

Photo
#15

WELL PIPE
- Behind
UPPER Boxwood
Hedge

3.a.3.a



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo

#16

WELL PIPE

- WELL
SERVICE

CROTH
WATER WELL INC.

3.a.3.a



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#17

Utility
Maintenance

NEW ELECTRIC
Feed to House
WE ENERGYS
TRENCHING
HOLE



Attachment: Konkel Exhibits 2-8 Photos 1-18 (9954 : Konkel full binder of Exhibits)

Photo
#18

NEW ELECTRIC
Fed to house
WEENERGIES

- TRENCH AREA
next to house
- 6-7' gapping
hole abutting
house



11333 N. Cedarburg Road
 Mequon, WI 53092-1930
 Phone: 262-242-3100
 Fax: 262-242-9655

www.ci.mequon.wi.us

Office of Inspections

TO: Board of Appeals
FROM: Greg Golden, Building Inspections Supervisor
DATE: December 19, 2024
SUBJECT: Appeal of Jeffrey and Susan Konkel 10808 N. Lake View Road

Background: The appellant is requesting a variance to the front yard setback for a back-up generator already installed. The violation was noted during the final inspection for the generator installation with proper permit.

Variance:

The appellant is requesting a front yard setback variance to Section 58-238 R-3 single family suburban residential district.

Per Table 58-249 Technical requirements of residential districts, the R-3 zoning district requires the following (see R-3 column of Exhibit A):

- Required front yard setback= 50'
- Proposed front yard setback for generator= 23.2'

Analysis:

Per Section 58-41 of Chapter 58, Zoning Code, the Board of Appeals shall determine if such variance will not be contrary to the public interest, where owing to special conditions a literal enforcement of the provisions of this chapter will result in practical difficulty or unnecessary hardship so that the spirit of this chapter shall be observed, public safety and welfare secured, and substantial justice done.

The appellant's variance application includes a survey confirming a front yard setback of 23.2 feet from the front property line to the generator (50' required).

Based on staff's analysis, the appellant could relocate the generator to achieve compliance with the required setback. After a recent site visit, staff identified alternate locations for the generator which comply with the required setback. These locations are highlighted yellow in exhibit B. In addition, the appellant does not substantiate a unique condition to the property, nor have they identified a hardship that is not self-imposed regarding the current location of generator. The two locations identified by staff as compliant options for location also do not generate a hardship.

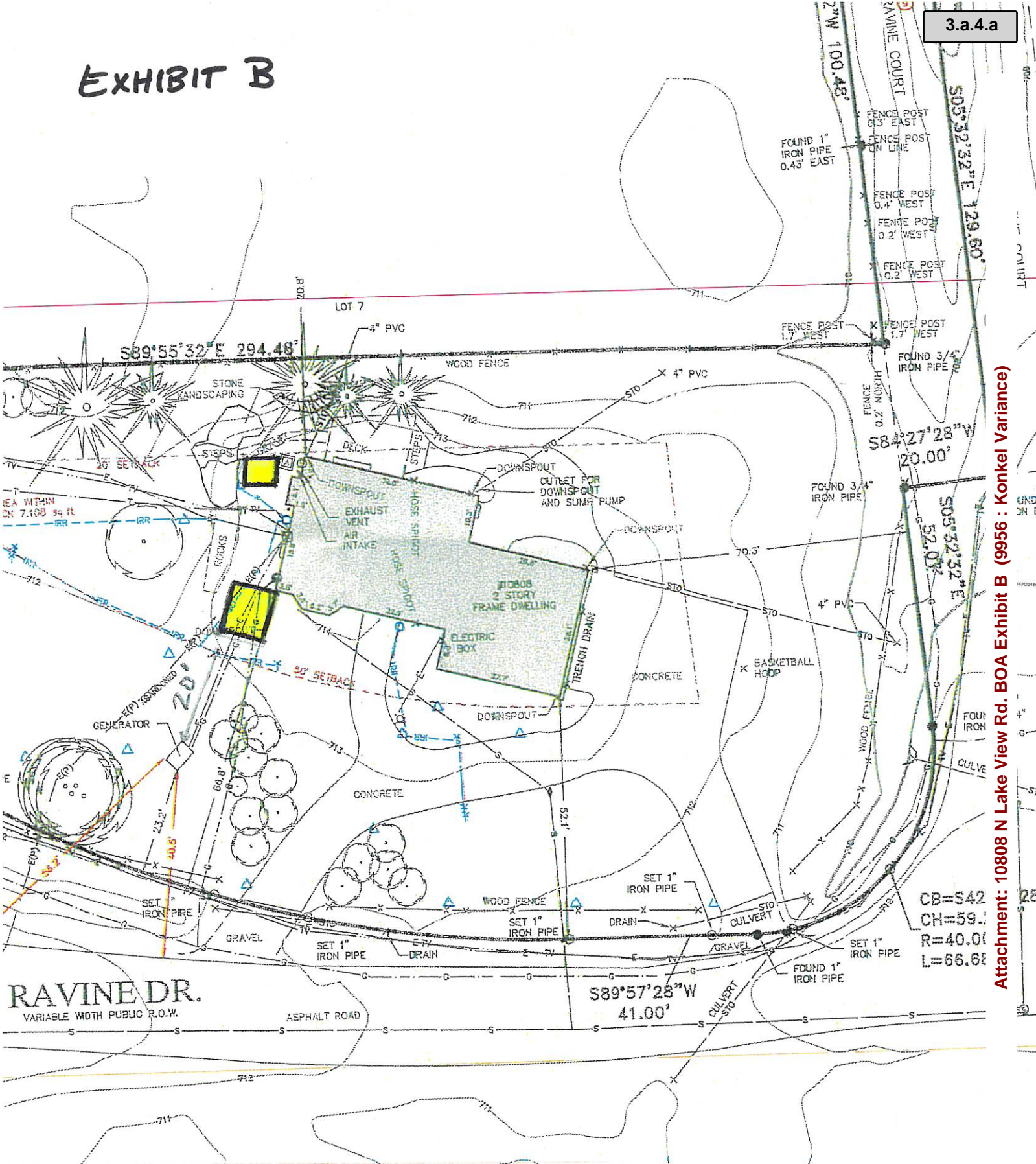
Staff Recommendation:

Staff recommends **denial** of the variance for a reduction to the front yard setback due to lack of hardship and the fact that there are alternate locations identified which are compliant.

Attachments:

10808 N Lake View Rd. BOA Exhibit B (PDF)

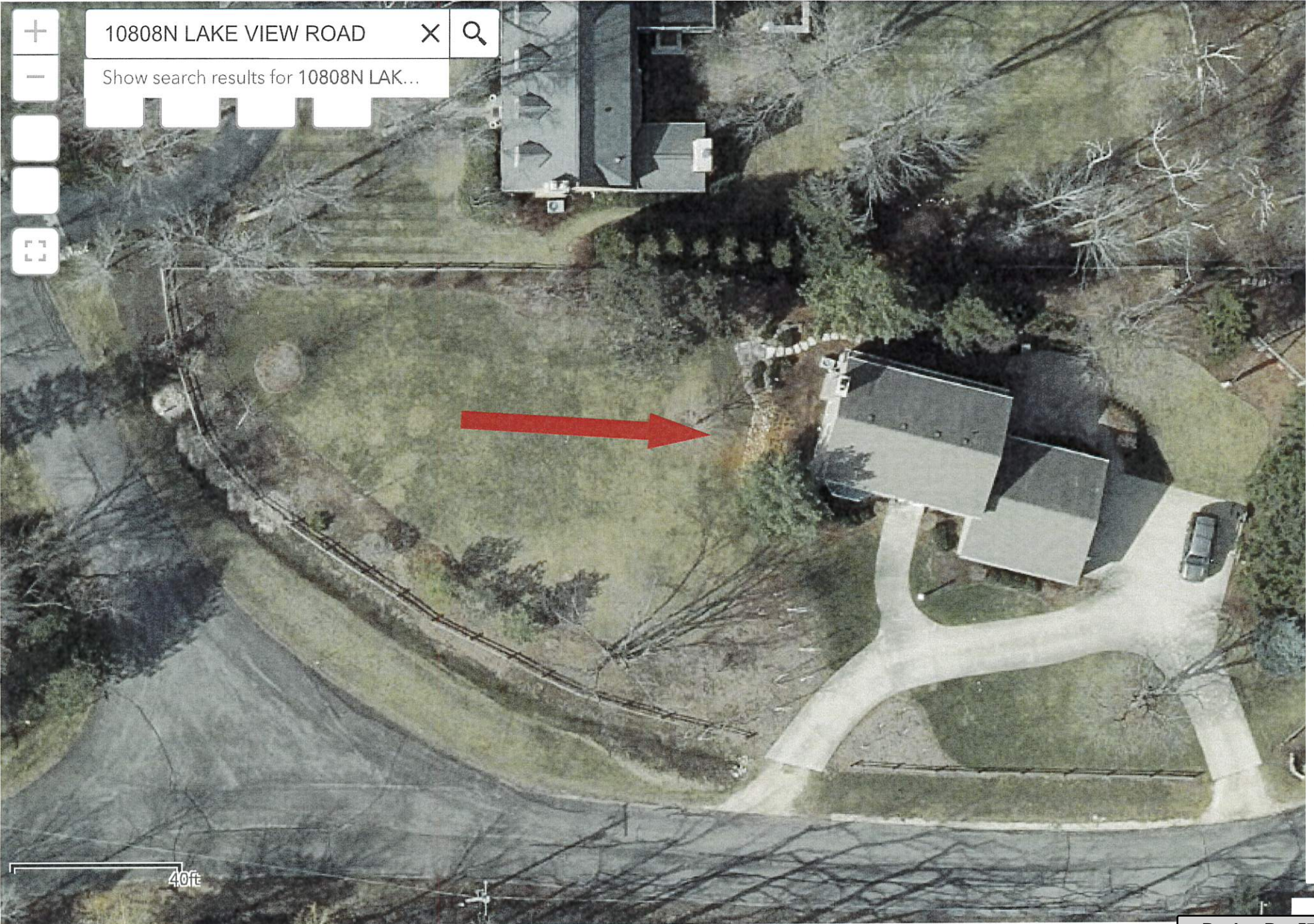
EXHIBIT B



Attachment: 10808 N Lake View Rd. BOA Exhibit B (9956 : Konkel Variance)

$CB=542$
 $CH=59.1$
 $R=40.0$
 $L=66.6E$

 Ozaukee County Parcel GIS



Attachment: Konkel GIS (9955 : Konkel GIS)

 Ozaukee County Parcel GIS



Attachment: Konkel GIS (9955 : Konkel GIS)

Sec. 58-249. Technical requirements of residential districts.

(a) *Generally.* Table 58-249 sets forth the technical requirements for each residential zoning district.

Table 58-249	R-1		R-1B	R-2	R-2B	R-3	R-4	R-5	R-6	RM
	Estate Lot Design	Conservation								
Minimum Lot Size	5.0 acres (217,800 sq. ft.)	0.75 acres (32,670 sq. ft.)	2.5 acres (108,900 sq. ft.)	2.0 acres (87,120 sq. ft.)	1.5 acres (65,340 sq. ft.)	1.0 acre (43,560 sq. ft.)	0.75 acres (32,670 sq. ft.)	0.5 acres (21,780 sq. ft.)	1.0 acre (43,560 sq. ft.)	One-bedroom units, 6,000 square feet (i.e., 7.26 units per acre) Two-bedroom units, 7,000 square feet (i.e., 6.2 units per acre) Three-bedroom units, 10,000 square feet (i.e., 4.35 units per acre)
Density	N/A	One dwelling per five acres	N/A	N/A	N/A	N/A	N/A	N/A	Four units per acre	N/A
Minimum Living Area										
Single-family dwelling units	1,800 sq. ft.	1,800 sq. ft.	1,600 sq. ft.	1,800 sq. ft.	1,400 sq. ft.	1,800 sq. ft.	1,600 sq. ft.	1,400 sq. ft.	N/A	N/A
One-bedroom units	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,000 sq. ft.	900 sq. ft.
Two-bedroom units	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,200 sq. ft.	1,100 sq. ft.
Three-bedroom units	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,400 sq. ft.	1,300 sq. ft.
Maximum Building Height*										
Dwelling Height	42 ft.	42 ft.	42 ft.	42 ft.	42 ft.	42 ft.	42 ft.	42 ft.	42 ft.	42 ft.
Accessory Structures	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.
Minimum Average Lot Width and Minimum Average Lot Length	300 ft.	N/A	200 ft.	200 ft.	175 ft.	150 ft.	130 ft.	120 ft.	150 ft.	150 ft.
Minimum Building Setbacks										
Local Streets	100 ft.	See text	50 ft.	50 ft.	50 ft.	50 ft.	50 ft.	50 ft.	50 ft.	50 feet (planning commission may vary to no less

Attachment: Code Sec. 58_249. Technical requirements of residential districts. (9960 : Codes Sec. 58_249)

(Supp. No. 58)

										than 25 feet)
Expressways— Freeways	100 ft.	See text	200 ft.	200 ft.	200 ft.	200 ft.	200 ft.	200 ft.	100 ft.	100 ft.
Primary Arterials	100 ft.	See text	100 ft.	100 ft.	100 ft.	100 ft.	100 ft.	100 ft.	100 ft.	100 ft.
Secondary Arterials	100 ft.	See text	80 ft.	80 ft.	80 ft.	80 ft.	80 ft.	80 ft.	80 ft.	80 ft.
Local Arterials	100 ft.	See text	70 ft.	70 ft.	70 ft.	70 ft.	70 ft.	70 ft.	70 ft.	70 ft.
Minimum Building Offset										
Generally	30 ft.	30 ft.	25 ft.	25 ft.	25 ft.	20 ft.	20 ft.	20 ft.	20 ft. (side); 35 ft. (rear)	15 ft.
Building or structures housing livestock	50 ft.	50 ft.	50 ft.	50 ft.	50 ft.	50 ft.	50 ft.	N/A	N/A	N/A
Maximum Lot Coverage Percentage	5%	10%	10%	10%	15%	15%	15%	20%	30%	30%

* See section 58-418(d)

(b) *Explanations.* As used in Table 28-248:

- (1) Minimum living area shall be measured from the outside of exterior walls (excluding cellars, basements, open porches, breezeways, garages and other spaces that are not used frequently or during extended periods for living, eating or sleeping purposes).
- (2) Minimum building setback shall be measured from the ultimate right-of-way line of each public street, road, or highway which abuts the subject property.
- (3) Minimum building offset shall be measured from each side and rear lot line other than a lot line subject to a minimum building setback.
- (4) Maximum lot coverage percentage shall be the percentage of a property covered by buildings and structures.

(c) *Special maximum lot coverage standards.*

- (1) Maximum lot coverage percentage shall not apply to a residential planned unit development unless the common council determines otherwise in the ordinance that creates the planned unit development.
- (2) If a property is in the R-1 through R-3 zoning districts and the property is smaller than the minimum lot size for the zoning district in which it is located, the maximum lot coverage percentage shall be the percentage applicable to the zoning district with a minimum lot size smaller than, but closest in size to, the property.

(Ord. No. 2021-1591, § I(Exh. A), 6-8-2021; Ord. No. 2023-1642, § I(Exh. A), 4-11-2023)

Sec. 58-419. Structures other than buildings.

- (a) All structures shall be subject to the setback, offset, building size and open space requirements of this chapter except as otherwise specifically provided by ordinance.
- (b) Structures not classified as buildings and less than six inches in height from the surface of the ground shall not require a building permit nor be subject to the setback or offset requirements of this chapter except as otherwise specifically provided by ordinance.
- (c) Fences, walls and other architectural screening devices, when anchored to supports, imbedded in the ground shall be considered permanent structures and shall be subject to the following:
 - (1) No structure shall be permitted that by reason of noise, dust, odor, appearance or other objectionable factor creates a nuisance or a substantial adverse effect upon the property value or reasonable enjoyment of the surrounding property.
 - (2) Any such structure less than four and one-half feet in height may be permitted anywhere on the lot.
 - (3) Any such structure in excess of four and one-half feet in height may be permitted provided it conforms to the open area, height, setback, and offset requirements of the zoning district in which it is located.
 - (4) Any such structure in excess of four and one-half feet, but not more than six feet in height, may be permitted to within five feet of a street right-of-way provided the side facing the street line is attractively landscaped and subject to approval by the building inspector.
 - (5) Any such structure in excess of four and one-half feet in height may be permitted closer than the required offset from an adjoining lot line, other than a street line, with the written consent of the adjoining property owner. Such structure shall not project forward of the building setback line.
- (d) Basketball structures (poles) may be located within the setback and/or offset areas if the basketball structure is located closer to the house than to the side, rear, or front property lines. Other recreational and miscellaneous structures greater than four and one-half feet in height shall be permitted provided such structure conforms to the open space, height, offset and setback requirement of the zoning district in which it is located and also conforms with section 58-171.

(Code 1957, § 3.03(8); Ord. No. 96-878, 5-14-1996; Ord. No. 2016-1488, § I(Att.), 1-10-2017



11333 N. Cedarburg Road
Mequon, WI 53092-1930
Phone: 262-242-3100
Fax: 262-242-9655

www.ci.mequon.wi.us

Office of City Clerk

TO: Board of Appeals
FROM: Beth Kong, Deputy Clerk
DATE: January 28, 2025
SUBJECT: The following attachments were submitted after the Konkels submitted their original application.

Attachments:

Neighbor Blom Email (PDF)

January 2nd 2025 Konkel Letter (PDF)

New photo exhibits 01.06.2025 (PDF)

From: blomdoug@gmail.com <blomdoug@gmail.com>
Sent: Tuesday, December 31, 2024 11:08 AM
To: Caroline Fochs <cfochs@ci.mequon.wi.us>
Subject: Board of Appeals meeting January 2, 2025 6:00 pm

This note is to support Jeffrey and Susan Konkell (The Applicant) to their request for Variance to Mequon Code Sec 58-419(a) regarding placement of their existing generator at 10808 N Lakview Road.

We (Frances and Douglas Blom) are the direct neighbors to the north of the Konkells at 10816 N. Lakeview Road. We have been friends and neighbors with the Konkells for over 30 years. It is my understanding from the documents of this appeal that the alternative options suggested by the City to relocate the generator involves moving the generator closer to our property, and in fact, one option is very close to our property line that is right next to our family den and master bedroom. We would certainly not appreciate the resultant noise and hardship that this would create and therefore fully support the variance to keep the generator installed where it is.

As the Konkells have stated, their property, and many of the properties in this neighborhood are unusual and unique due to the historical development of the neighborhood going back more than 80 years, and it only makes sense that a variance be granted to match the unusual nature and dimensions of the property sizes and to maintain friendly relationships within the neighborhood.

Sincerely,

Doug and Fran Blom
10816 N. Lakeview Road

Attachment: Neighbor Blom Email (10009 : New Packet info)

January 2nd 2025

Board of Appeals Hearing

Introduction:

In response to Greg Golden's reply dated, December 19th 2024 to our variance request and a earlier email reply, dated October 1st 2025 (also listed in our Appeal application filing packet) we would like the following items further noted...

First Item:

Front yard/side yard/back yard, identification—Setback/offset, determination

It is our belief that our primary front yard setback of 50' should begin and end on Lake View Road and not continue onto Ravine Drive, as indicated by our address 10808 N. Lake View Road, even though our home and driveway access is on Ravine Drive.

Ravine Drive is not a through street eastward after it intersects with Lake View Road. It dead-ends into the partially vacated street/cul-de-sac known as Ravine Court, as per Exhibit #1, our survey. (This is also indicated by a City of Mequon "Dead End" sign located on the southern shoulder of said intersection per New Photo #19) Beyond the "Dead End" sign, eastward —Ravine Drive becomes (more less) an access road to service our property and (3) others—(2) of which also have a Lake View Road address and the last property has a Ravine Court address. As a matter of fact, on a Mequon "road/streets" map dated, April 1st 1996, Certified in accordance with sec. 86.30 Wis. stat. Ravine Drive and Ravine Court are not even acknowledged beyond this intersection. (New Exhibit #9)

We believe that our property/lot, which abuts Ravine Drive should serve (if only, in part) as our side yard, allowing for a 20' offset—as our generator would then be compliant.

Second Item:

The edge of street measurement to generator, per Exhibit #1, Survey and Photo #11, is as follows...

The southern corner of our generator sits 40.5' (at one point) and 56.2' (at another point) to edge of the road. Each measurement varies greatly as a result of the increased shoulder depth from edge of road to generator.

Third Item: (Begins on Page 2)

-2-

City of Mequon Ordinance Code 58-8, definition of “structure”

Per an email to Greg Golden, dated October 1st 2024, asking for the actual City of Mequon Code which sites the 50’ setback requirement for generators—Greg Golden’s response sites the Mequon Code of Ordinances as—58-249, 58-419 (a), 58-8, to include air conditioners and generators falling under this definition of “structure.”

After reviewing 58-8 code definition of “structure” there is no verbage identifying air conditioners and generators as “structures”.

Are we in setback violation? And/or is this code per its current definition of “structure” valid for a setback requirement for our generator?

The NEC (National Electric Code) specifies generators to be defined as “electrical equipment” and not as “structures”.

(This is also noted and explained on the Ziller Forum website, supported by Ziller Electric—a Generac Premiere Dealer. It is stated that, “a generator is not a structure, it is listed electrical equipment per the NEC (National Electric Code) and listed appliance per the ICC IFGC and NFPA 54. The NFPA has redefined the definition of structure for the 2017 NEC. A structure is now defined as that which is built or constructed other than equipment.”)

If the City of Mequon wishes to include house generators and A/C units under the definition of “structure” in it’s code—the definition of “structure” should be updated and amended—to support language identifying “electrical equipment” such as, generators and A/C units into the “structure” definition.

4th Item

Placement recommendation and considerations... Health and safety concerns.

That the suggested relocation areas of our generator by Greg Golden are in too close proximity to windows and fresh air intake vents, allowing for potential carbon monoxide intrusion.

Further reporting indicates that stand generators installed even though compliant with allowed setbacks to window, doors, vents, etc.... could still cause dangerously high levels of carbon monoxide intrusion into homes. The allowances are suggested as minimums and subject to variable conditions, such as, firewall ratings, weather conditions to include wind speed/velocity and draft-prone opening to home, such as windows, doors, and vents. The running duration of a generator can also increase the risk of carbon monoxide intrusion.

-3-

One of the very first questions we asked our preferred Kohler generator installer (during our initial meeting): Is it better to have the generator sit closer to our house rather than further away. His reply was—“the further away from your house, the better”.

Item #5

Adding new Photo #20, showcasing downspout runoff in proposed relocation area...

Downspout runoff from recent rainfall is less than .5” per new Photo #20. The view is from our living room, front bay window to the proposed relocation site, which sits at the front (SW) corner of our house.

The photo also shows the proposed relocation of the generator from our current side yard location (as seen in the photo) to the front (SW) corner of our home—just to the right of the downspout.

Cover Letter

Date: January 6th 2025

To: City of Mequon
Board of Appeals
11333 N. Cedarburg Rd.
Mequon, WI 53092

From: Jeffrey and Susan Konkell
10808 N. Lake View Rd.
Mequon, WI 53092
H: (262) 241-3711 (Landline)

RE: Additional Photo's and Exhibits submitted Board of Appeal

To Whom It May Concern:

The following photo's and exhibits are to be included as part of our response document submitted on January 2nd 2025 for our then scheduled hearing.

- Photo's: #19 and #20
- Exhibit's: #9 through #14

Also as mentioned per a phone call by the City Attorney, on same day, to reschedule the hearing date to February—we would definitely be open to a site visit for the board members, if they thought necessary.

Thank you.

Sincerely,


Jeffrey and Susan Konkell

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

3.a.8.c

how
#19

KAVING DRIVE
Beyond
"DEAD END" sign
to
Cul de sac -
Raving Court

Packet Pg. 68

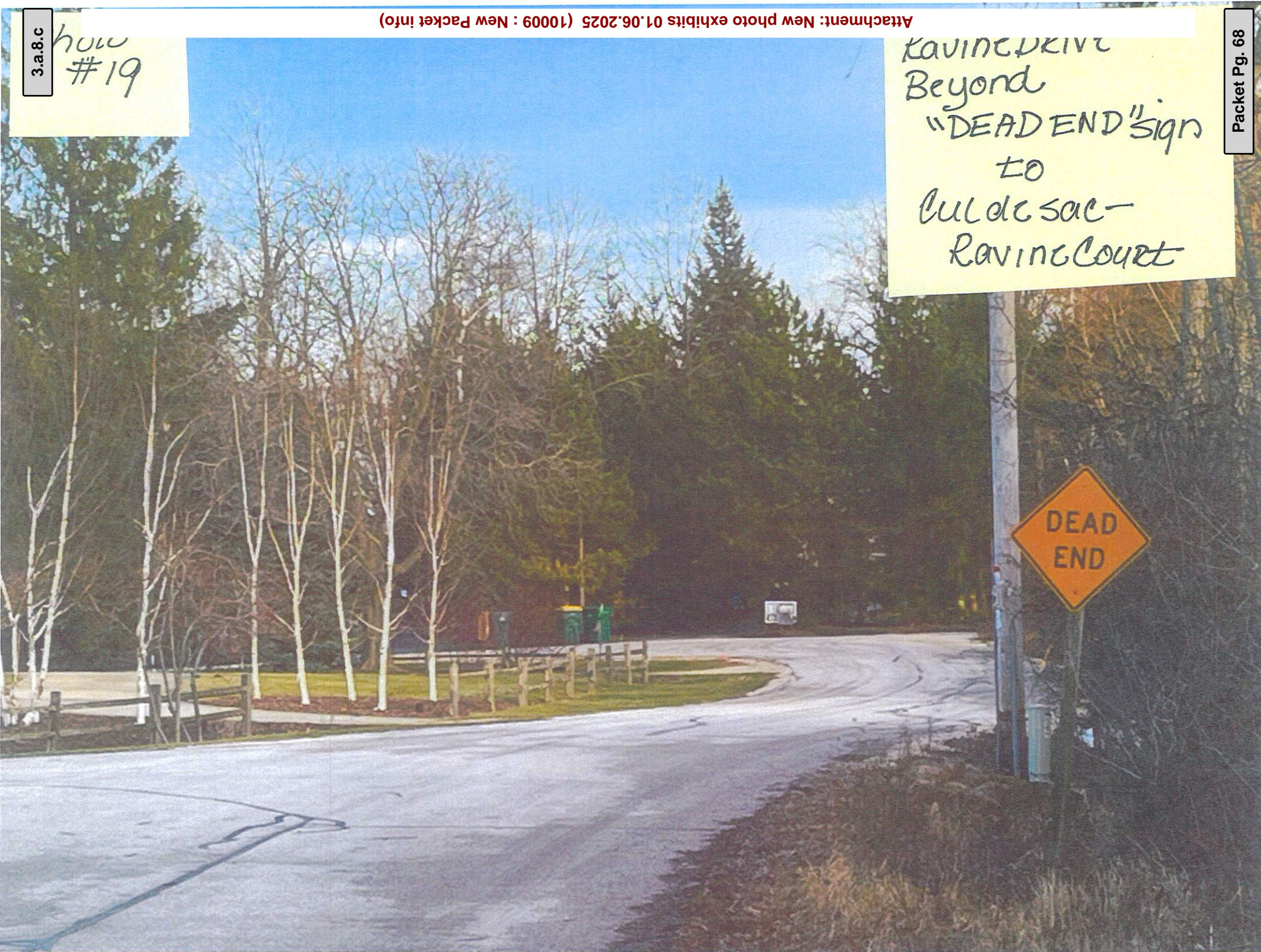


Photo #20

View From Front Bay Window

3.a.8.c

- Recent Rain
- Downspout Runoff

Proposed area to move generator



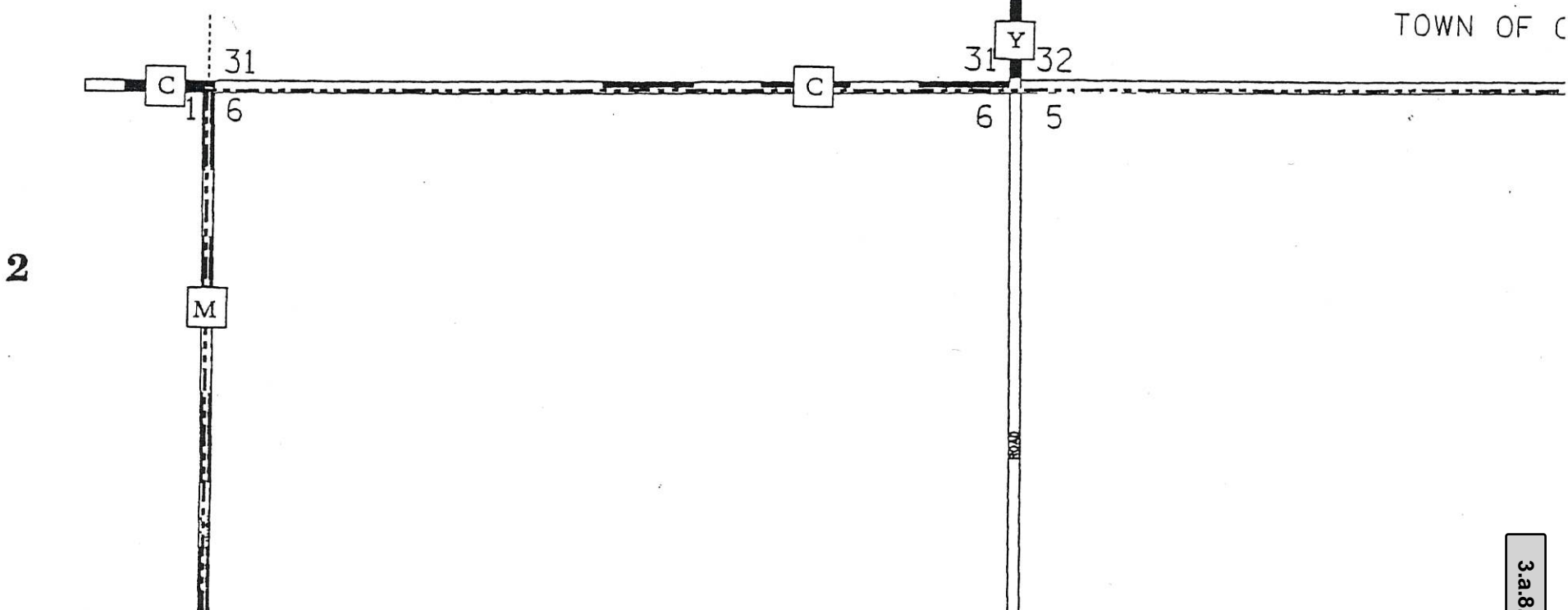
Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

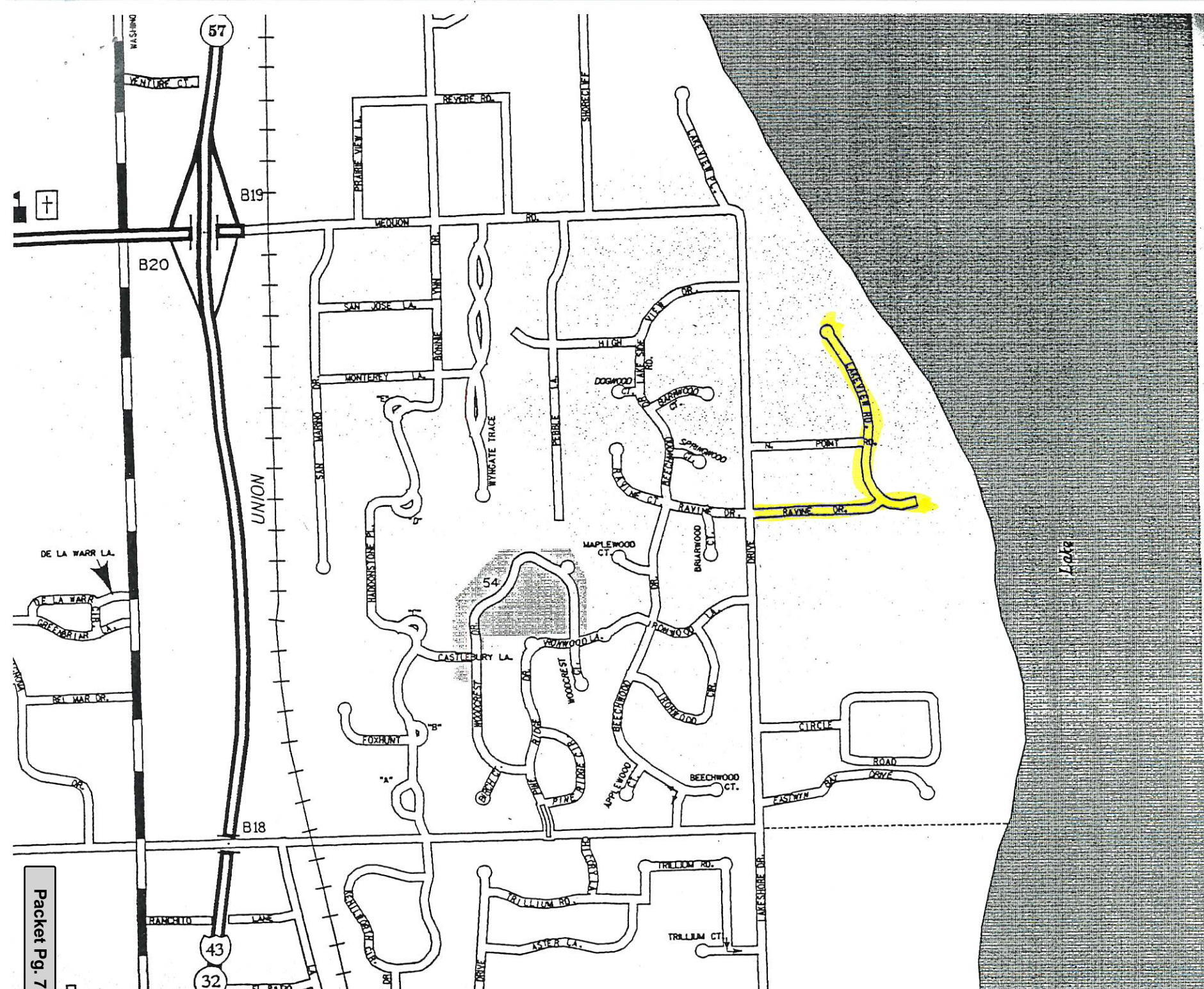
EXHIBIT #9

DATE	MILEAGE FOR LOCAL ROADS/STREETS	LOCAL ROADS/STREETS Certified in accordance with sec. 86.30 Wis. stat.	
(1) 4-1-96	190.23	Signature:	Date:
(2) 1-1-98	.		
(3) 4-1-98	.		
		Title:	

MILEAGE COUN TRUN
6.

- 1 (1) THIS DATA REPRESENT THE LAST CERTIFIED MILEAGE AS CORRECTED BY THE DISTRICT WHICH MAY HAVE BEEN USED FOR PAST TRANSPORTATION AIDS.
- (2) THE TOWN CHAIRMAN OR CITY/VILLAGE CLERK IS TO FILL IN THE MILEAGE TO BE CERTIFIED AS OPEN TO THE PUBLIC AS OF THE FOLLOWING JANUARY, INCLUDING THE NEW CHANGES THAT ARE MADE ON THE PLAT.
- (3) THIS DATA REPRESENTS MILEAGE ADJUSTMENTS MADE BY THE D.O.T. DISTRICT DUE TO FIELD VARIFICATION, INVENTORY, ANNEXATION, ETC. TRANSPORTATION AIDS PAYMENTS MAY BE MADE BASED ON THIS FIGURE.





Attachment: New photo exhibits 01.06.2025 (1009 : New Packet info)

Exhibit #10



Ziller Forum

↑ CATEGORIES ▾

Is a generator a "Structure"?

Code Questions

hoghead
CODE QUESTIONS
Jul 28, 2016

I was told by a generator inspector that the state of N.C. considers a generator a structure and it needs to have a ground rod

Other Stuff

ohmslaw

Jul 28, 2016

We had a municipality tell us they considered them a structure. We had to have storm run off, waste water management, highway dept., fire dept. and several other departments sign off before we could get a building permit. We also had to abide by all setbacks as if we were building a shed . that being said I don't think they cared about the ground rod.

Tim

*
Brian Baughman
Jul 29, 2016

A generator is not a structure, it is listed electrical equipment per the NEC and a listed appliance per the IFC IFGC and NFPA 54. In fact the NFPA has redefined the definition of structure for the 2017 NEC. A structure is now defined as that which is built or constructed, other than equipment. The enclosure on all Generac generators is listed as part of the stationary engine generator assembly per the requirements in the UL 2200 standard for Stationary Engine Generator Assemblies. NEC Article 250.35 has purview over the grounding

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

of permanently installed generators. This NEC article has 2 parts, Separately Derived Systems, where the transfer switch switches the utility neutral conductor upon transfer (see the informational note in 250.30), and Nonseparately Derived Systems where the transfer switch has a solid neutral connection to the utility neutral conductor. All Generac optional standby generators are designed and leave the factory as nonseparately derived systems. This is why NEC Article 702.7(B) requires signage on the service equipment warning that the removal of the grounding electrode conductor or bonding jumper in the equipment creates a shock hazard at the generator. I will provide a copy of a letter that I wrote on the grounding requirements for Generac generators to Chris Flagg at Ziller that can be given to your local inspectors if they require grounding electrodes on the generators.

Hodgy

Jul 29, 2016

hoghead;40612 wrote:

I was told today by an inspector that the state of N.C. considers a generator a structure and it needs to have a ground rod.

So, does that same inspector require a ground rod on other structures such as a garage or a garden shed ? Our County does require the set-back from property line.

MEC

Jul 29, 2016

Thanks Brian.

Always informative.

We have one town here that treats it like a "structure" for the purpose of enforcing setbacks.

There was an ongoing issue with people placing them on the lot line therefore pissing off the neighbors.

ceb58

Jul 31, 2016

Hodgy;40625 wrote:

So, does that same inspector require a ground rod on other structures such as a garage or a garden shed ?

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

Our County does require the set-back from property line.

If there is a feeder supplying power to the building it is not the inspector but the NEC that requires a rod to be used.

Set backs are not an electrical code but a building code issue.

Brian Baughman

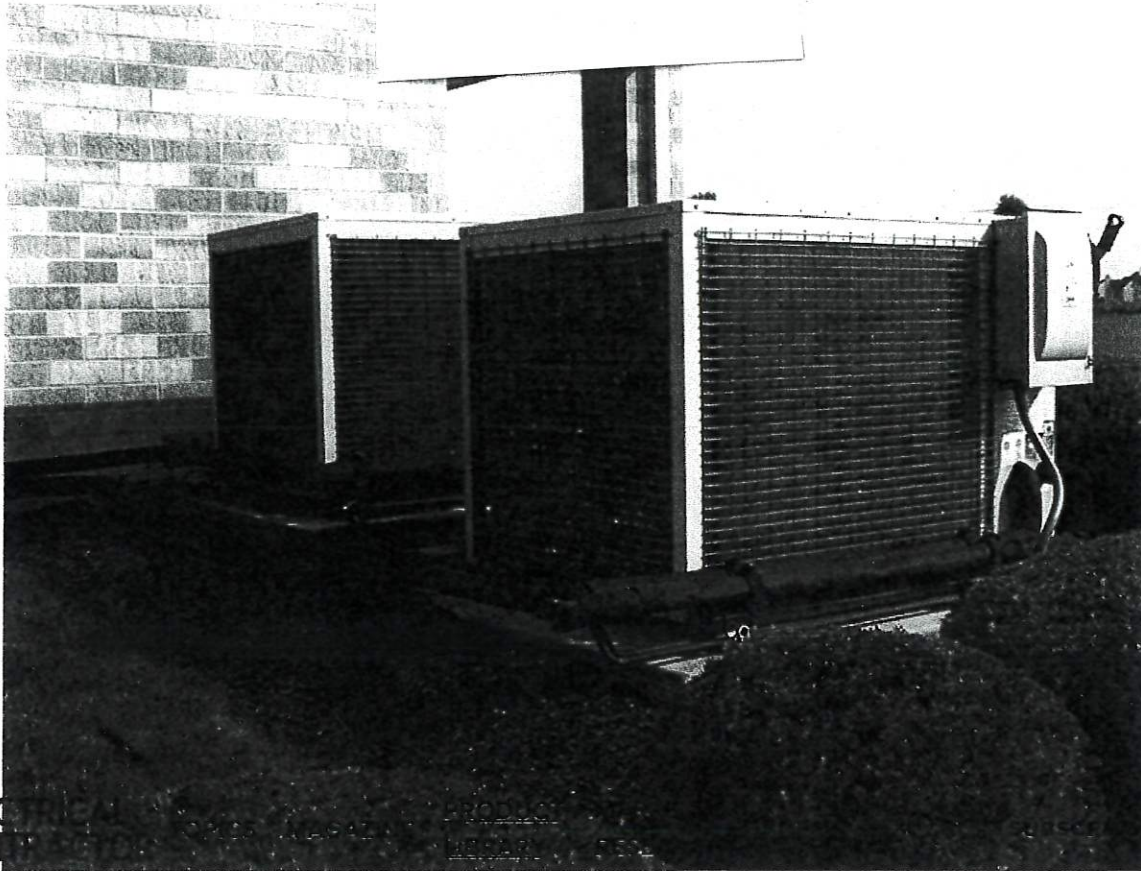
Aug 01, 2016

Again, the generator is NOT A STRUCTURE, it's equipment. Yes, a building supplied by a feeder is require to have grounding electrodes (250.32). If the transfer equipment does not switch the neutral conductor, the grounding electrodes at the electrical service on the building serve this purpose. The NEC allows the servic grounding electrodes and system bonding jumper to serve as the grounding means for a a generator as lor as the transfer switch does not switch the neutral conductor.

 English

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

Exhibit # 11



[ABOUT US](#)
[NEWSLETTERS](#)
[EMAIL](#)
[PREFERENCES](#)

Author: Michael Johnston
(Last Page)

ARTICLE TAGS

Codes & Standards

Code Comments

Advertisement

You're reading an older article from ELECTRICAL CONTRACTOR. Some content, such as code-related information, may be outdated. Visit our homepage to view the most up-to-date articles.

At some properties, a single electric utility service supplies multiple buildings or structures. The service could directly supply one of the buildings, and feeders or branch circuits supply other buildings from that service equipment. Another arrangement might be that the utility service is freestanding, such as on a pole or pad-mounted, and feeders or branch circuits supply all buildings or structures. Specific grounding and bonding rules apply to separate buildings or structures supplied by feeders or branch circuits. The requirements are located in Part III of National Electrical Code (NEC) Article 250 (specifically, 250.32).

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

Section 250.32(A) requires a grounding electrode system in accordance with Part III of Article 250. This means that the grounding electrode requirements in 250.50 must be applied to separate buildings or structures supplied by feeders or branch circuits. If any of the grounding electrodes in 250.52(A) are present (exist) at the building or structure served, they must be bonded together to form a grounding electrode system. This includes the water pipe electrodes, metal building frame electrodes, concrete-encased electrodes, and so forth, as provided in 250.52(A). If no electrodes are present, one must be installed. The exception to the grounding electrode requirement in 250.32(A) applies to a building or structure that is supplied by a single branch circuit, either an individual or multiwire that includes an equipment grounding conductor (EGC).

*** Building, structure or equipment**

***** For consistent application of the NEC, it is important to differentiate between a building, a structure and equipment. The definitions provide some clarity in that all buildings are structures, while not all structures are buildings. As an example, a house is a building, while a billboard sign is a structure. The other important factor to understand is the difference between equipment and structure. As examples, a motor or a ground-mounted air conditioner are equipment covered by Chapter 4 of the NEC. When installed outdoors, they are typically anchored to a concrete pad or footing, which is the structure. However, this does not render the combination of the equipment and footing a structure, thereby predicating the requirements for a grounding electrode. Structures are constructed. Any grounding electrode at these types of equipment installations is likely an auxiliary grounding electrode and, therefore, is optional.

Another example is a parking lot luminaire installed on a pole. The luminaire and the pole are equipment covered by NEC Article 410, and the concrete base is a structure to which the equipment is mounted. The key difference between equipment and a structure is that structures are constructed, as indicated in the definition, while equipment is produced or manufactured typically in a facility and delivered to the site for installation.

***** It is important to establish a clear differentiation between equipment and structures to effectively determine when a grounding electrode is required to be installed by 250.32(A) and when it is an option in accordance with 250.54. Note that it might be a good design practice to install an auxiliary grounding electrode for equipment that is freestanding and remote from buildings, but it is optional.

NEC -
The National Electric Code -
or NFPA 70

Advertisement

Advertisement

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

With Safety, Never Compr...



EGC required

In accordance with 250.32(B)(1), a feeder(s) or branch circuit(s) supplying a separate building or structure generally must include an EGC. The EGC can be a wire, or it can be any wiring method provided in Section 250.118 that qualifies as an EGC. If the EGC is a wire type, it must be sized in accordance with 250.122. Exception No. 1 allows the grounded (usually the neutral) conductor of feeders or branch circuits to be used for grounding at separate buildings or for structures under specific and prescriptive conditions.

First, an EGC is not included with the circuit supplying the separate building or structure. Second, there are no common electrically continuous metallic paths between the feeder source and the destination at the building or structure served. And finally, there is no ground-fault protection of equipment installed on the supply side of the feeder. This exception applies only to existing premises wiring systems. For existing premises wiring systems that use a grounded conductor in this manner, the grounded conductor must not be smaller than the sizes required in Section 250.122 or 220.61 as applicable. Exception No. 2 also permits the grounded conductor to be used in the manner specified in 250.32(A)(1) Exception No. 2.

Bonding piping systems

Section 250.104 provides requirements for bonding of metal water piping systems and other metal piping installed in or attached to a building or structure supplied by feeders or branch circuits. The bonding jumper must not be less than the sizes provided in Table 250.66.

Specific grounding and bonding rules apply to separate buildings or structures supplied by a feeder(s) or branch circuit(s). A grounding electrode is generally required at such buildings or structures. Understanding what constitutes equipment, and what qualifies as a building or structure, will help you determine the requirements for grounding electrodes or the option of installing an auxiliary.

SHARE THIS ARTICLE ▼

ABOUT THE AUTHOR

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)



Michael Johnston

NECA Executive Director of Codes and Standards (retired)

JOHNSTON, who retired as NECA's executive director of codes and standards in 2023, is a former member and chair of *NEC* CMP-5 and immediate past chair of the *NEC* Correlating Committee. Johnston continues to serve on the NFPA Standards Council and the UL Electrical Council. Reach him at mjohnston0431@gmail.com.

Email: [**mjohnston0431@gmail.com**](mailto:mjohnston0431@gmail.com)

Advertisement

Advertisement

Advertisement

Advertisement

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

Exhibit #12



New posts Search forums

Welcome to the new and improved Building Code Forum. We appreciate you being here and hope that you are getting the information that you need concerning all codes of the building trades. This is a free forum to the public due to the generosity of the Sawhorses, Corporate Supporters and Supporters who have upgraded their accounts. If you would like to have improved access to the forum please upgrade to Sawhorse by first logging in then clicking here: Upgrades

Forums Commercial Codes Commercial Building Codes

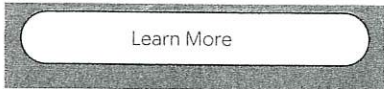
Forums What's new

Log in Register Search

8,000+ Building Code Questions

Take the guess work out of what material to study for your certification exam.

Building Code Masters



Coordinating the IBC and NEC definitions of "Building"

👤 🔒

W

wwhitney
BRONZE MEMBER

Oct 20, 2022
637

Berkeley, CA

The 2023 NEC and the 2021 IBC have very similar definitions of "Structure":

2021 IBC "STRUCTURE. That which is built or constructed."

2023 NEC "Structure. That, which is built or constructed, other than equipment."

The NEC added that last clause "other than equipment" in the 2017 version to clarify, for example, that if you run a feeder to a free-standing self-contained power pedestal set in the middle of a field, it is equipment only, therefore not a structure, and therefore does not require a grounding electrode system. [If you instead use a panelboard on a 4x4 post in the ground, it is still a bit ambiguous whether the 4x4 post is equipment or not; if not, that is a structure and would require a grounding electrode system.]

However, the 2023 NEC and 2021 IBC have very different definitions of "Building":

2021 IBC "BUILDING. Any structure utilized or intended for supporting or sheltering any occupancy."

2023 NEC "Building. A structure that stands alone or that is separated from adjoining structures by fire walls."

[Apparently the NEC is happy to call a flagpole or a human-scale sculpture a building, but the IBC does not wish to do that.] The main distinction the NEC is making between structures and buildings is that bit about firewalls. For the NEC a series of townhouses separated by firewalls would be one structure but multiple buildings; and so for example when 230.2 says in effect "one service per building," that automatically allows one service per townhouse without requiring any exception or other language.

My question is a basic one about the IBC, with which I'm not so familiar, particularly its fire requirements. What is the IBC equivalent term for the way the NEC is using the term "Building"? I.e. a portion of a structure which is separated by (sufficiently rated) firewalls?

Thanks,
Wayne

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

Article 100 Definitions. Structure.

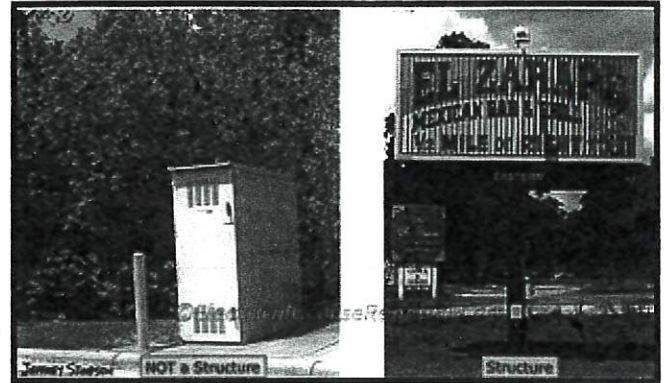
Code Change Summary: The definition of a "Structure" has been revised for clarity.

The new definition makes it clear that a structure does NOT include "equipment".

This change is important for uniform enforcement of the NEC®. Structures supplied with electricity are often required by code to have grounding electrode systems, disconnecting means and sometimes even an intersystem bonding terminal.

Prior to this clarification, the following items may have been misinterpreted as a structure:

- Freestanding pool equipment
- Well pumps
- Freestanding switchgear
- A post mounted receptacle



↑
NOT a
= structure

↑
structure

* Click to Enlarge
A structure is "that which is built or constructed, other than equipment".

Below is a preview of Article 100. See the actual NEC® text at NFPA.ORG for the complete code section. Once there, click on their link to free access to the 2017 NEC® edition of NFPA 70.

2014 Code Language:

Structure: *That which is built or constructed.*

2017 Code Language:

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)

Structural alterations means any change, other than incidental repairs, which would expand or prolong the life of the supporting members of a building or structure, such as bearing walls, columns, beams and girders.

* *Structure* means a combination of materials other than natural terrain or plant growth erected or constructed to form among other things, a building, shelter, sign enclosure, retainer, container, support, base, or decoration.

Does not include - ("electrical equipment")

Structure, accessory. See *Accessory use or structure.*

Structure, permanent means a structure placed on or in the ground or attached to another structure in a fixed and determined position, and intended to remain in place for a period of more than nine months.

Structure, principal means a structure used or intended to be used for the principal use as permitted on such lot by the regulations of the zoning district in which it is located.

Structure, storage means a detached structure other than a principal garage that is used for the parking and/or storage of motor vehicles of the families resident upon the premises; boats, campers and other recreational vehicles; lawn and garden equipment and tools, as well as any other items or materials as may be necessary.

Structure, temporary means any structure other than a permanent structure as defined above.

Subdivision means the division of a lot, parcel or tract of land by the owner thereof or his agent for any purpose where:

- (1) The act of division creates five or more parcels or building sites of 1½ acres each or less in area; or
- (2) Five or more parcels or building sites of 1½ acres each or less in area are created by successive divisions within a period of five years.

See further definition and regulations in article VIII of this chapter.

Surveyor means a licensed and certified land surveyor authorized to do business in the state under Wis. Stats. § 443.06.

Trailer camp. See *campground.*

structure defined as:

* all buildings are structures - Built or constructed other than equipment...
Equipment is produced and manufactured in a facility

Attachment: New photo exhibits 01.06.2025 (10009 : New Packet info)