



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appletonwi.gov

Meeting Agenda - Final Board of Building Inspection

Wednesday, July 16, 2025

10:00 AM

Council Chambers, 6th Floor

1. Call meeting to order

2. Pledge of Allegiance

3. Roll call of membership

4. Approval of minutes from previous meeting

[25-0814](#) Board of Building Inspection Minutes from 10-9-24

Attachments: [BBI Minutes from 10-9-24.pdf](#)

5. **Public Hearing/Appealances**

6. **Action Items**

[25-0815](#) **3029 N. Ballard Road (Tax Id #31-1-6705-00)** Applicant was issued a Notice of Noncompliance for violation of Section 4-141(a) of the Municipal Code, which requires accessory buildings over 100 sq. ft. to be placed on a concrete slab. The applicant does not accept Inspections Supervisor Kurt Craanen's description (interpretation) of the ordinance.

Attachments: [StaffMemo 3029 N. Ballard Road BoardofBldgInspection For07-16-25.pdf](#)
[3029 N. Ballard Road Documents.pdf](#)

7. **Information Items**

8. **Adjournment**

Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.

Any questions about items on this meeting are to be directed to Kurt Craanen, Inspections Supervisor, at 920-832-6411.

Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Minutes - Final-revised Board of Building Inspection

Wednesday, October 9, 2024

2:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

Mayor Woodford called the meeting to order at 2:00 p.m.

2. Pledge of Allegiance

3. Roll call of membership

Present: 5 - Siebers, Abshire, Woodford, Henson and Homan

4. Approval of minutes from previous meeting

[24-1276](#)

Meeting Minutes from 12/1/22

Attachments: [Meeting Minutes from 12-1-22.pdf](#)

Alderperson Siebers moved, seconded by Attorney Abshire that the minutes be approved. Roll Call. Motion carried by the following vote:

Aye: 5 - Siebers, Abshire, Woodford, Henson and Homan

5. **Action Items**

[24-1277](#)

841 W. Lawrence St. (31-3-0899-01) Property recently changed from commercial use to residential use. Request to continue to use an existing stair that is thirty (30) inches wide as a required means of egress from the second story. Section 321-04(2)(a) of the Uniform Dwelling Code as adopted by Section 4-136 of the Municipal Code, requires stairs to be thirty-six (36) inches in width.

Attachments: [841 W. Lawrence St.pdf](#)

Henson moved, seconded by Siebers, that the action item 24-1277 be amended to change the wording fire alarm to smoke detector in bullet point #3 in the contingencies.

Homan moved, seconded by Siebers, that the amendment be amended to add that the platform over the porch roof be built to code and allow for egress between 2nd egress exit and ladder. Roll Call. Motion carried by the following

vote:

Aye: 5 - Siebers, Abshire, Woodford, Henson and Homan

Siebers moved, seconded by Henson, that the Action Item 24-1277 be approved as amended as reflected in the following contingencies:

- Install exit sign above door leading to ladder
- Create a fire evacuation plan and mount it in the living area of apartment
- Install a smoke detector synced with the lower unit in the main living area for increased awareness .
- The platform over the porch roof be built to code and allow for egress between 2nd egress exit and ladder.

Roll Call. Motion carried by the following vote:

Aye: 5 - Siebers, Abshire, Woodford, Henson and Homan

6. Information Items

7. Adjournment

A motion was made by Siebers, seconded by Henson, that this meeting was adjourned at 2:15 p.m.. The motion carried by the following vote:

Aye: 5 - Siebers, Abshire, Woodford, Henson and Homan



CITY OF APPLETON

MEMORANDUM

Date: July 16, 2025
To: Board of Building Inspection
From: Kurt W. Craanen, Inspections Supervisor
Subject: Variance Request to 4-141(a) of the Municipal Code - 3029 N. Ballard Road

GENERAL INFORMATION

The owner of 3029 N. Ballard Road is requesting a variance to allow a 120 sq. ft. shed to remain without a concrete slab. Section 4-141(a) of the Municipal Code requires that accessory buildings that are more than 100 sq. ft. are required to be on a concrete slab.

BACKGROUND

On August 12, 2024, a complaint was called into the Inspections Division regarding a shed constructed without a permit at 3029 N. Ballard Road.

The owner of the property was contacted, and on August 20, 2024, the owner was issued a building permit for an 8' x 12' shed and an electrical permit for the wiring of the shed.

On August 22, 2024, inspections were conducted for the shed and the electrical wiring. Multiple electrical violations were noted. By December 23, 2024, most of the wiring had been removed.

Also, on August 22, 2024, the owner was told to install uplift straps. After a subsequent inspection on August 30, 2024, the owner was informed since the shed was over 100 sq. ft., a concrete slab is required.

On December 20, 2024, the owner was again told that the shed is over 100 sq. ft., and a concrete slab is required. The owner wanted to keep concrete pavers that are 12" x 18".

A Notice of Noncompliance was issued on December 23, 2024 to replace the concrete pavers with a full concrete slab.

The owner spent the winter out of state and stated he did not receive the initial notice. A second notice was sent to the owner on June 26, 2025, which also included the initial letter.

The owner stopped at City Hall on July 7, 2025 and applied for a variance because he did not accept the description (interpretation) of the Inspections Supervisor.

RECOMMENDATION

Staff recommends the proposed variance request be denied.

Return to: Department of Public Works
 Inspection Division
 100 North Appleton Street
 Appleton, Wisconsin 54911
 (920) 832-6411

City of Appleton Application for Board of Building Inspection

Meeting Date: 7/16/2025

Please write legibly and also submit a complete reproducible plan (maximum size 11" x 17"). A complete plan includes, but is not limited to, all structures, lot lines and streets with distances to each. There is a non-refundable \$45.00 fee for each variance application. The non-refundable fee is payable to the City of Appleton and due at the time the application is submitted.

Property Information	
Address of Property (Variance Requested) <i>3029 N BALLARD RD</i>	Parcel Number <i>31-1-6705-00</i>
Zoning District <i>R1B</i>	Use <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial

Applicant Information	
Owner Name <i>Richard K. Dellwagel</i>	Owner Address <i>3029 N. BALLARD RD</i>
Owner Phone Number <i>920-210-0144</i>	Owner E Mail address (optional) <i>Rhdwagel@GMAIL.COM</i>
Agent Name <i>N/A</i>	Agent Address <i>N/A</i>
Agent Phone Number	Agent E Mail address (optional)

Variance Information
Municipal Code Section(s) Project Does not Comply <i>H-141-A</i>
Brief Description of Proposed Project <i>STATES Storage Shed does NOT meet Code DOES NOT ACCEPT KURT CRAANENS DESCRIPTION OF CRDRIANCE!</i>

Owner's Signature (Required): *Richard K. Dellwagel* Date: *7/1/25*

Payment Entry Form

Result: Payment Authorized Confirmation Number: 178785519

Your payment has been authorized successfully and payment will be processed.

The City of Appleton Inspections thanks you for your payment. For questions about your account, please call 920-832-6413. Thank you for using our bill payment services.

Please save or print a copy of this receipt for record keeping purposes.

My Bills

Description	Amount
1 - Board of Building Inspections payment of \$45.00 on Variance Address 3029 N BALLARD	\$45.00

Customer Information

First Name: RICHARD
 Last Name: HOLLNAGEL
 Address Line 1:
 Address Line 2:
 City:
 State:
 Zip Code:
 Phone Number:
 Email Address:
 Estimated Costs: 45.00

Subtotal:	\$45.00
Convenience Fee:	\$1.50
Total Payment:	\$46.50

Payment Information

Payment Date: 07/07/2025
 Card Type: Visa
 Card Number: *****8550

Signature: _____ Date: ____/____/____

By signing this receipt you agree to the terms and conditions of this service.

You will see one line item on your credit or debit card statement indicating the amount you paid and will be identified as *City of Appleton GOV*. If you have any questions about the charges please call 1-888-891-6064.

Customer Service Info for 31-1-6705-00

Customer Service	
DATE OF COMPLAINT:	8/28/2024
REQUEST NUMBER:	243178
REQUEST DESC:	SHED BUILD THAT IS BIGGER THAN 8'X 12'
LOCATION DESC:	PERMIT APPLICATION SHOWS SHED IS 8'X 12'
HOUSE NUMBER:	3029
DIRECTION N/S/E/W:	N
STREET NAME:	BALLARD
STREET TYPE:	RD
REQUEST TYPE CODE:	2 - PROPERTY MAINTENANCE
REQUEST SUB TYPE:	1 - STRUCTURE
REQUEST STATUS:	CANCELLED
ASSIGNED TO EMP:	VICTORIA DREHMEL

Customer Service	
DATE OF COMPLAINT:	8/12/2024
REQUEST NUMBER:	<u>242728</u>
REQUEST DESC:	NEW SHED, NO PERMIT
LOCATION DESC:	BACK YARD
HOUSE NUMBER:	3029
DIRECTION N/S/E/W:	N
STREET NAME:	BALLARD
STREET TYPE:	RD
REQUEST TYPE CODE:	12 - WORK WITHOUT PERMIT
REQUEST SUB TYPE:	1 - BUILDING
REQUEST STATUS:	OPEN
ASSIGNED TO EMP:	VICTORIA DREHMEL

City of Appleton
 100 North Appleton Street, Appleton WI 54911
 Phone: (920) 832-6411 Fax (920) 832-6464

Permit No. E 24-0656
 Key No. 31-1-6705-00
 Receipt No. 1613916234
 Permit Fee \$50.00
 Date 8/20/2024
 For Finance Use Only 15520-4402

ELECTRICAL PERMIT

TO THE ELECTRICAL INSPECTOR:

I hereby agree, with the issuance of this permit, to do only the work specified herein and to faithfully comply with the laws and regulations of the State of Wisconsin and the ordinances of the City of Appleton.

NAME OF OWNER		NUMBER AND STREET	
RICHARD HOLLNAGEL		3029 N. BALLARD RD.	
TYPE OF BUILDING		WHY ISSUED	
<input checked="" type="checkbox"/> One Family	<input checked="" type="checkbox"/> New Building - SHED	<input type="checkbox"/> Separate Garage	<input type="checkbox"/> Rewire
<input type="checkbox"/> Two Family	<input type="checkbox"/> Addition	<input type="checkbox"/> Pool	<input checked="" type="checkbox"/> New
<input type="checkbox"/> Commercial/Industrial	<input type="checkbox"/> Remodel	<input type="checkbox"/> Hot tub	<input type="checkbox"/> Demo
<input type="checkbox"/> Multi-Family		<input type="checkbox"/> Basement	<input type="checkbox"/> Other _____
		<input checked="" type="checkbox"/> Other SHED	

CLASS OF SERVICE			
<input type="checkbox"/> New	Meters Required _____	<input type="checkbox"/> Single Phase	<input type="checkbox"/> Two Wire
<input type="checkbox"/> Service Change	Amp _____	<input type="checkbox"/> Three Phase	<input type="checkbox"/> Three Wire
<input type="checkbox"/> Temporary	Voltage _____		<input type="checkbox"/> Four Wire

List a brief description of the work and the areas where the work will be conducted:

LIGHTS CIRCUIT TO GARDEN SHED.

Send fees and both copies to the Electrical Inspector. Receipt and your copy will be returned upon approval. Fees are non-refundable. Submit approved plans when required. Call 920-832-6411 for all required inspections.

x Richard K. Hollnagel
 Licensed Master Electrician State/Masters License No.
 (Print)

\$200
 Estimated Cost

x [Signature]
 Signature of Master

Job Foreman/Daytime Telephone Number

Electrical Contractor State Electrical Contractors No.

[Signature]
 Electrical Inspector

REASONABLE ACCOMMODATIONS FOR PERSONS WITH DISABILITIES WILL BE MADE UPON REQUEST AND IF FEASIBLE

City of Appleton
 Inspection Division 100 N. Appleton St. Appleton WI 54911
 Phone (920) 832-6411 Fax (920) 832-6464

Permit No. B24-0734
 Key No. 31-1-6705-00
 Receipt No. 1613910234
 Permit Fee: 50.00 **TOTAL: > \$80.00**
 Records Fee: 30.00
 Date: 8/20/24

BUILDING PERMIT

Owner/Contractor RICHARD HOLLNAGEL Project Address 3029 N. BALLARD RD.
 Project Type 8x12 SHED Estimated Completion Date: 8/16/24
 Lot # _____ Subdivision _____ Zoning RIA
 Comments _____

Why Issued		Type of Building	
<input type="checkbox"/> New Building	<input type="checkbox"/> Moving	<input checked="" type="checkbox"/> One Family	<input type="checkbox"/> Garage-Attached
<input type="checkbox"/> Addition	<input type="checkbox"/> Siding	<input type="checkbox"/> Two Family	<input type="checkbox"/> Garage-Separate
<input type="checkbox"/> Remodel-Interior	<input type="checkbox"/> Fence	<input type="checkbox"/> Multi-Family	Other <u>SHED</u>
<input type="checkbox"/> Remodel-Exterior	Other <u>SHED</u>	<input type="checkbox"/> Commercial	
<input type="checkbox"/> Deck			
Estimated Costs \$ <u>3,000</u>			

Building/Size Information			Set Backs Accessory Bldg	Lot Information
O.A. Dimension _____	1st Floor <u>8x12</u>	Front <u>BACK YARD</u>	<input type="checkbox"/> Corner <input checked="" type="checkbox"/> Interior Type _____ Size _____ Area _____ <input type="checkbox"/> Easement on property	
Basement Area _____	2nd Floor _____	Main Bldg <u>210 ft</u>		
Garage Area _____	3rd Floor _____	Side Yard <u>> 8 ft</u>		
No. Stories <u>1</u>	Volume _____	Rear Yard <u>> 70 ft</u>		
Height <u>12</u>	Total Area <u>96 sq. ft.</u>	ACC. BLDG <u>> 5 ft</u>		

Main Bldg Setbacks	Type of Construction	Foundation	Type of Foundation
Set Back _____	<input checked="" type="checkbox"/> Frame	<input type="checkbox"/> Full Bsmt	<input type="checkbox"/> Concrete
Side Yard _____	<input type="checkbox"/> Masonry	<input type="checkbox"/> Partial Bsmt	<input type="checkbox"/> Block
Side Yard _____	<input type="checkbox"/> Steel	<input type="checkbox"/> Crawl Space	<input type="checkbox"/> Pier Supports-Per Engineering
Rear Yard _____	Exterior Finish _____	<input type="checkbox"/> Frost Wall	<input type="checkbox"/> Steel <input type="checkbox"/> Wood
		<input checked="" type="checkbox"/> Concrete Slab	<input type="checkbox"/> Posts No. _____

Contractor OWNER - RICHARD HOLLNAGEL Address 3029 N. BALLARD RD Telephone 920-210-6144

Contractor E-mail _____ Contact Name: _____

Architect/Designer _____ Address _____ Telephone _____

The undersigned on behalf of itself, and as an authorized agent of the property owner when applicable, agrees to construct the above-described building in accordance with plans and specifications submitted herewith, and in strict compliance with all the provisions of the Building Code and Zoning Ordinance of the City of Appleton and the Building Code of the State of Wisconsin, and to grant permission for periodic reasonable inspections, including inspections by the Building Inspector and Assessor or designee thereof, as a condition of receiving this permit. Permit fees are nonrefundable.

Applicant (signature) Richard K. Hollnagel Applicant (print) Richard Hollnagel

State DC # _____ State DCQ# _____ Approved by Victoria Deehmel

Permits granted by: Board of Appeals Board of Building Inspections State Bldg Permit # _____ Stormwater # _____

THIS PERMIT DOES NOT COVER PLUMBING, ELECTRICAL OR HEATING INSTALLATIONS

APPLICANT SHALL CALL THE INSPECTION DIVISION FOR REQUIRED INSPECTION: 920-832-6411

Reasonable Accommodations for persons with disabilities will be made upon request and if feasible.

CITY OF APPLETON
INSPECTION DEPARTMENT
NOTICE OF NONCOMPLIANCE

TAX KEY: 31-1-6705-00 3029 N BALLARD RD

PAGE: 1

FILE NO: 2024.0841 BUILDING NOTICE DATE: 12/23/24
COMPLIANCE DATE BY: April 30, 2025 INSPECTOR: VICTORIA DREHMEL

SENT TO: HOLLNAGEL FAMILY REV T
C/O RICHARD HOLLNAGEL
3029 N BALLARD RD
APPLETON WI 54911

COPIES TO:

ORDER# CODE SECTION

1.0 Municipal Code
 4-141 (a)

Violation- 8x12 detached shed on pavers.

Correction- Replace pavers with concrete
slab and anchor shed to slab.

Unattached one- or 2-family accessory
buildings shall be constructed on
concrete slabs and shall
conform to UDC and American Concrete
Institute (ACI) standards.

CITY OF APPLETON
INSPECTION DEPARTMENT
NOTICE OF NONCOMPLIANCE

TAX KEY: 31-1-6705-00 3029 N BALLARD RD

PAGE: 2

FILE NO: 2024.0841 BUILDING NOTICE DATE: 12/23/24
COMPLIANCE DATE BY: April 30, 2025 INSPECTOR: VICTORIA DREHMEL

SENT TO: HOLLNAGEL FAMILY REV T COPIES TO:
C/O RICHARD HOLLNAGEL
3029 N BALLARD RD
APPLETON WI 54911

All cited violations shall be corrected by April 30, 2025 unless an extension of time is granted in writing by the Inspector. Each day that the violation continues after the date for compliance shall constitute a separate offense subject to remedies and penalties by the authority having jurisdiction.

AVOID DELAY.

REPORT CORRECTIONS TO THE INSPECTION DIVISION AS SOON AS COMPLETED.

Inspector: _____
VICTORIA DREHMEL
Inspection Department
100 N. Appleton St.
Appleton, WI 54911-4799
Telephone: (920) 832-6411

OFFICE USE ONLY

Date of Distribution: 12/23/24

Date of Completion: _____



"...meeting community needs...enhancing quality of life."

COMMUNITY AND ECONOMIC DEVELOPMENT
Inspections Division
100 North Appleton Street
Appleton, WI 54911
Telephone: (920)832-6411
OPEN VIOLATIONS

June 26, 2025

TAX KEY : 31-1-6705-00

VIOLATION ADDRESS : 3029 N BALLARD RD

COMPLIANCE DATE : July 10, 2025

INSPECTION DATE : 12/23/24

INSPECTOR : VICTORIA DREHMEL

SENT TO : HOLLNAGEL FAMILY REV T
C/O RICHARD HOLLNAGEL
3029 N BALLARD RD
APPLETON WI 54911

SECOND NOTIFICATION- Non-Compliance Orders

Reference is made to the Notice of Non-Compliance mailed to you on **December 23, 2024** reporting one or more violations of the City of Appleton Municipal Code. As of this date, the record shows the violations have not been corrected and are still outstanding.

To save staff time, thus saving tax dollars, it is expected that the recipient of a notice will contact this office when the corrections are completed. If, for good reason, the corrections cannot be completed, the recipient may request an extension of the compliance date.

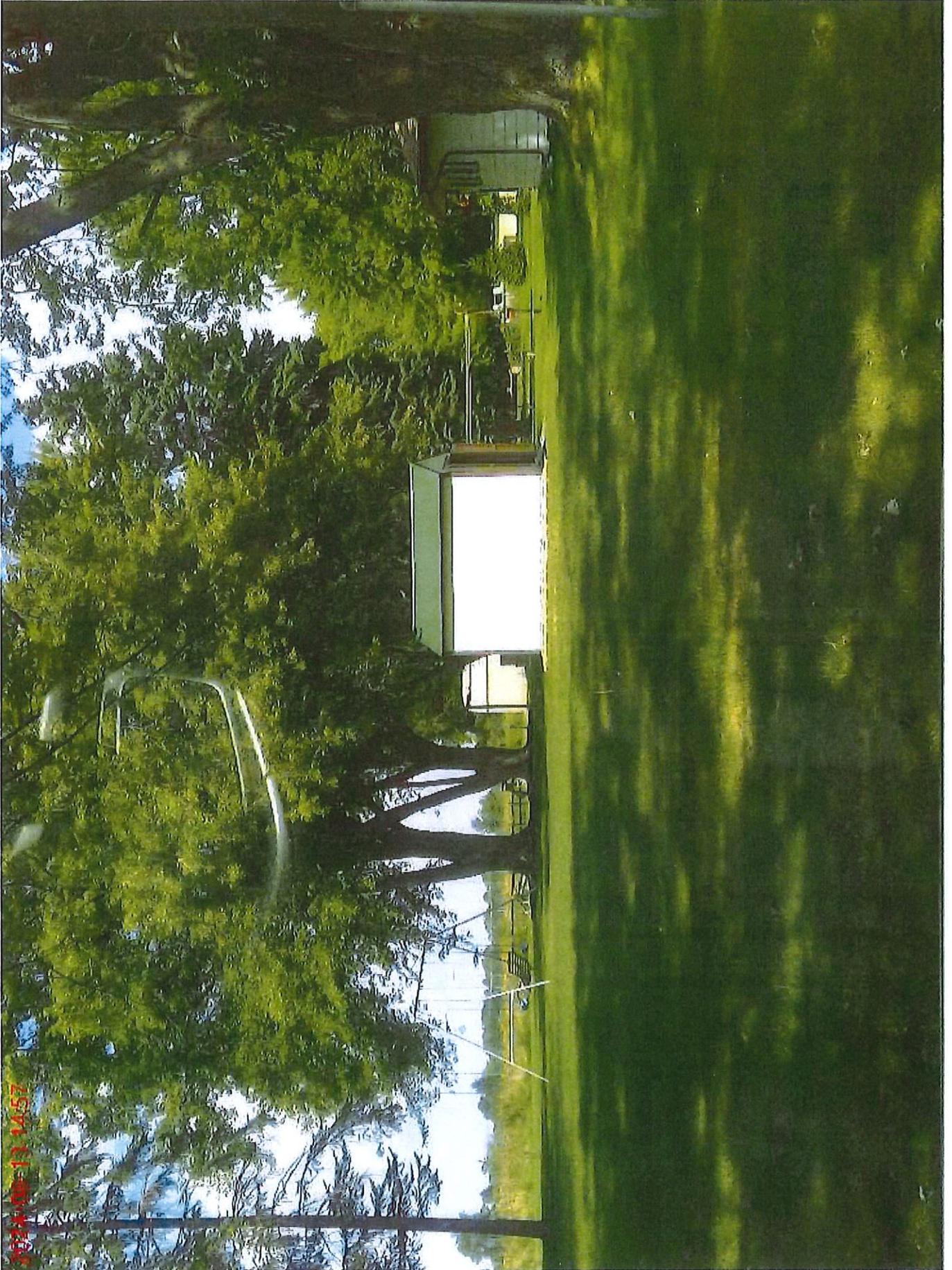
Our records indicate no notice of completion or request for extension of deadline has been received. Referenced notice will be held in abeyance as a past-due notice until **July 10, 2025** to allow time for completion of all corrections. Each day that the violation continues past the compliance date is considered a separate offense subject to remedies and penalties.

Please notify the Inspection Division as soon as corrections are completed. **If you have any questions or concern, please contact our office at (920) 832-6411 and speak with the Inspector listed on the attached copy of the notice.**

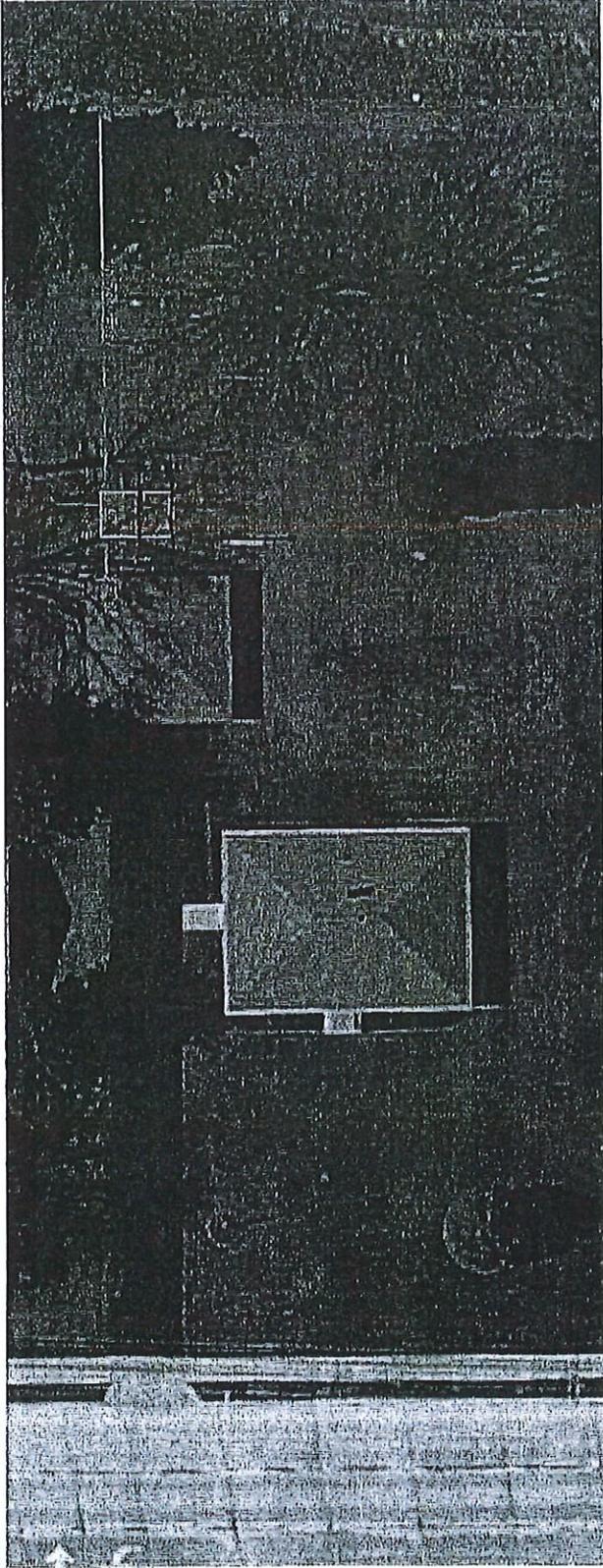
Sincerely,

VICTORIA DREHMEL
Inspector

Enclosure: Notice of Noncompliance



2024-11-14 14:57



*Blue line - not orange
VD 8.20.24

Kurt Craanen

From: DO NOT REPLY
Sent: Tuesday, August 20, 2024 9:29 AM
To: Brian Schewe; Timothy S. Meyer; Daniel J. Meissner; Adam R. Anderson; Erick Cardew; Dan Faust; Ryan P. Andersen; Richard J. Hamlet; Victoria L. Drehmel
Cc: Inspections.Clerical
Subject: Inspection Request - 3029 N Ballard

Submitted By: "Richard" <postmaster@appleton.org>

Date of Inspection Notification: 8/20/2024

Address of property: 3029 N Ballard

Type of property: Residential

Category: Electrical Building

Type of Inspection: Final

Date Project Ready to Inspect: 8/22/2024 Time of Day For Inspection: AM

Contact Name Requesting Inspection: Richard

Contact Phone Requesting Inspection: 920-210-0144

Contractor: owner

How Should Inspector Access Property: owner will be home

Comments:

E-Mail:

=====

Kurt Craanen

From: DO NOT REPLY
Sent: Friday, December 20, 2024 2:16 PM
To: Brian Schewe; Jesse Larsen
Cc: Inspections.Clerical
Subject: Inspection Request - 3029 N. Ballard Road

Submitted By: "RICHARD HOLLNAGEL" <kurt.craanen@appletonwi.gov>

Date of Inspection Notification: 12/20/2024

Address of property: 3029 N. Ballard Road

Type of property: Residential

Category: Electrical

Type of Inspection: Final

Date Project Ready to Inspect: 12/23/2024 Time of Day For Inspection: AM

Contact Name Requesting Inspection: RICHARD HOLLNAGEL

Contact Phone Requesting Inspection: 920-210-0144

Contractor: Owner

How Should Inspector Access Property: Owner will be home- owner stated that all electrical hookups were removed.

Comments: B24-0656- see notes

E-Mail: kurt.craanen@appletonwi.gov

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Sec. 4-141. Garages and accessory buildings.

(a) *Unattached.* Unattached one- or 2-family accessory buildings shall be constructed on concrete slabs and shall conform to UDC and American Concrete Institute (ACI) standards. No concrete slab shall be required for accessory buildings where the structure does not exceed one hundred (100) square feet in area and the building is securely anchored. Accessory buildings less than fifty (50) square feet are exempt from permits, however must comply with all zoning ordinance standards. Unattached accessory buildings shall maintain a fire separation distance that meets UDC standards. All one- or 2-family unattached buildings with overhead doors shall have at least one exit door that is a minimum of 32" in width. The overhead door shall not be used as an exit door. Accessory buildings that are 150 square feet or larger are considered a garage for the purposes of this section.

3. Vertical reinforcement shall have a minimum yield strength of 60,000 psi.

4. Solid-grouted hollow units or cores containing vertical reinforcement shall be filled with masonry grout that complies with ASTM C 476.

5. In lieu of the reinforcement provisions of Tables 321.18-D, 321.18-E and 321.18-F, alternative reinforcing bar size and spacing having an equivalent cross-sectional area or reinforcement per linear foot of wall is permitted, provided the spacing of the reinforcement does not exceed 72 inches and reinforcing bar size does not exceed No. 11.

6. The depth below grade, wall height and reinforcement spacing may exceed the maximum values indicated in Tables 321.18-D, 321.18-E and 321.18-F only if the design is based on structural analysis.

(4) **WOOD FOUNDATIONS.** Wood foundations shall be designed and constructed in accordance with the wood-foundation standard adopted in Table 320.24-6m.

Note: The department will accept Permanent Wood Foundations Design and Construction Guide published by the Southern Forest Products Association through the Southern Pine Council, as complying with this standard. The Design and Construction Guide requires a 3.5 inch thick floor slab if a poured concrete floor slab is used.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (3) (intro), Register, February, 1985, No. 350, eff. 3-1-85; cr. (2) (c) to (e), r. and recr. Tables C and D, r. (3) (a) 2., renum. (3) (a) 1. to be (a), Register, January, 1989, No. 397, eff. 2-1-89; am. (intro.), (2) (b), (3) (b) and Table 21.18-D, cr. Table 21.18, r. (2) (c), renum. (2) (d) and (e) to be (2) (c) and (d), Register, March, 1992, No. 435, eff. 4-1-92; renum. (1) to (3) to be (2) to (4), and am. (3) (b), (4) (intro.) and (b), Table 21.18-A, r. (intro.) and Table 21.18, cr. (1), (3) (e), Register, November, 1995, No. 479, eff. 12-1-95; am. (2), Register, January, 1999, No. 517, eff. 2-1-99; r. and recr. (1) (b), (3), Tables 21.18-C and D, am. (2) (a), r. Table 21.18-B, renum. Table 21.18-A to be Table 21.18-B and cr. (1) (c), (d), Tables 21.18-A, E and F, Register March 2001 No. 543, eff. 4-1-01; CR 02-077: r. (1) (c) 1., renum. (1) (d) to be (1) (e), cr. (1) (d), am. (4) (intro.), (b) and Tables 21.18-A, C and F Register May 2003 No. 569, eff. 8-1-03; CR 08-043: am. (1) (d) 2. b. and Tables 21.18-C to F, cr. (2) (a) (title) and (b) (title), r. and recr. (3) (a) and (4) Register March 2009 No. 639, eff. 4-1-09; correction in (1) (e), (2) (a), (3) (b) 1., 2., 5., 6., (4), Table 321.18-C to -F made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672; CR 15-041: am. (1) (c) 3. a., cr. (1) (c) 3. d., am. (1) (d) 2. c., (4) Register December 2015 No. 720, eff. 1-1-16; CR 15-043: am. (1) (d) 1. c. Register December 2015 No. 720, eff. 1-1-16; correction under s. 13.92 (4) (b) 7. Register December 2015 No. 720.

Subchapter VI — Floors

SPS 321.19 Floor design. Floors shall support all dead loads plus the minimum unit live loads as set forth in s. SPS 321.02. The live loads shall be applied to act vertically and uniformly to each square foot of horizontal floor area. Basements shall be provided with wood or concrete or similar type floors that comply with s. SPS 321.20 or 321.205.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; r. and recr., Register, March, 1992, No. 435, eff. 4-1-92; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

SPS 321.20 Concrete floors. (1) When concrete floors are provided, the thickness of the concrete shall measure at least 3 inches.

(2) When a concrete floor is placed in clay soils, a 4-inch thick base course shall be placed in the subgrade consisting of clean graded sand, gravel or crushed stone.

(3) When a concrete floor is placed on sand or gravel soils, the base course may be omitted unless drain tile is installed. If drain tile is installed, the requirements of s. SPS 321.17 shall be met.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. Register, January, 1989, No. 397, eff. 2-1-89; r. and recr. Register, January, 1999, No. 517, eff. 2-1-99; correction in (3) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

SPS 321.203 Garage floors. (1) **MATERIALS.** Garage floors shall be constructed of concrete or other noncombustible materials which are impermeable to petroleum products. Slab-on-grade concrete garage floors shall be at least 4 inches thick and placed over at least 4 inches of granular fill.

Note: It is not the intent of sub. (1) to require a concrete floor to be sealed to make it completely impermeable.

(2) **CONFIGURATION.** The floor shall be sloped such that water is removed in accordance with one of the following:

(a) Water drains toward the overhead door or to exterior grade such that no damage will be caused to any structural member or wall covering of the garage or the dwelling.

(b) Water drains into an interior floor drain that complies with the requirements of ch. SPS 382.

Note: See s. SPS 382.34 for floor drain requirements.

History: Cr. Register, November, 1995, No. 479, eff. 12-1-95; CR 02-077: r. and recr. (2) Register May 2003 No. 569, eff. 8-1-03; correction in (2) (b) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

SPS 321.205 Wood floors in contact with the ground. Wood floors in contact with the ground shall comply with the requirements under s. SPS 321.18 (4).

History: Cr. Register, January, 1989, No. 397, eff. 2-1-89; am. Register, January, 1999, No. 517, eff. 2-1-99; correction made under s. 13.93 (2m) (b) 7., Stats., Register, March, 2001, No. 543; CR 02-077: r. and recr. Register May 2003 No. 569, eff. 8-1-03; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

SPS 321.21 Precast concrete floors. Precast concrete floors shall be designed through structural analysis, or load tables furnished by the precast product fabricator may be used, provided the load tables were developed using structural analysis or load testing.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; r. and recr. Register, March, 1992, No. 435, eff. 4-1-92.

SPS 321.22 Wood frame floors. Unless designed through structural analysis, wood frame floors shall comply with the following requirements:

(1) **FLOOR JOISTS.** (a) *General.* 1. Floor joists shall comply with the structural requirements and live load determination under s. SPS 321.02.

Note: See ch. SPS 325 Appendix A for design information.

2. Where the joists of a floor system are parallel to, and located between bearing walls above and below, the joists shall be doubled.

(b) *Floor joists on concrete walls.* Where a sill plate is provided for floor joists on poured concrete, the sill plates shall be fastened to the foundation.

Note: Section SPS 321.18 (1) (d) requires the floor joists to also be fastened to the sill plate.

(c) *Floor joists on masonry walls with a solid top course.* Where a sill plate is provided for floor joists on solid block top course masonry, the sill plate shall be fastened to the foundation.

(d) *Floor joists on masonry walls with open top course.* 1. Where the masonry wall has an open top course, a sill plate at least as wide as the foundation wall shall be fastened to the foundation.

2. Where anchor bolts are used on masonry walls with an open top course, the minimum width of an individual piece making up the sill plate shall be at least 5.5 inches.

Note: A sill plate can be made of multiple pieces to achieve the full width.

(2) **FLOOR TRUSSES.** Metal plate connected wood floor trusses shall be designed in accordance with the Design Specifications for Metal Plate Connected Parallel Chord Wood Trusses and the National Design Specification for Wood Construction. Truss members shall not be cut, bored or notched.

(3) **GIRDERS AND BEAMS.** (a) Girders and beams shall be selected from Table 321.22-A1 or Table 321.22-A2 or shall be designed through structural analysis.

(b) Wood girders and beams shall be fitted at the post or column. Adjoining ends shall be fastened to each other to transfer horizontal loads across the joint. Beams shall also be fastened to the posts with framing anchors, angle clips, or equivalent.

(c) Where intermediate beams are used, they shall rest on top of the girders; or shall be supported by ledgers or blocks fastened to the sides of the girders; or they may be supported by approved metal hangers into which the ends of the beams shall be fitted.

(d) Lateral restraint for all wood beams shall be provided at all columns using a saddle or other approved connection where the beam meets one of the following conditions:

1. The beam is not restrained at both ends.

2. The beam is more than 11.25 inches deep using actual measurement.