CITY OF BLOOMINGTON

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February 20, 2025 @ 5:30 p.m. City Hall, 401 N. Morton Street Common Council Chambers, Room #115

https://bloomington.zoom.us/j/82448983657?pwd=enJxcnArK1pLVDI nWGROTU43dEpXdz09

Meeting ID: 824 4898 3657 Passcode: 319455 CITY OF BLOOMINGTON BOARD OF ZONING APPEALS (Hybrid Meeting) February 20, 2025 at 5:30 p.m.

City Hall, 401 N. Morton Street Common Council Chambers, Room #115 and via Zoom

Virtual Meeting: <u>https://bton.in/Zoom</u>

Meeting ID: 824 4898 3657 Passcode: 319455

Petition Map: https://bton.in/G6BiA

ROLL CALL

APPROVAL OF MINUTES: January 23, 2025

PETITIONS CONTINUED TO: March 27, 2025

- AA-17-22 **Joe Kemp Construction, LLC & Blackwell Construction, Inc.** Summit Woods (Sudbury Farm Parcel O) W. Ezekiel Dr. Parcel(s): 53-08-07-400-008.002-009, 53-08-07-400-008.004-009... Request: Administrative Appeal of the Notice of Violation (NOV) issued March 25, 2022. *Case Manager: Jackie Scanlan*
- V-27-22 **Cutters Kirkwood 123, LLC** 113 E. Kirkwood Ave. Parcel: 53-05-33-310-062.000-005 Request: Variances from Downtown Character Overlay standards to allow less non-residential area and less large display windows; and a variance from the requirement to align with the front setback of an adjacent historic structure in the Mixed-Use Downtown zoning district with the Courthouse Square Character Overlay (MD-CS). <u>Case Manager: Jackie Scanlan</u>

CU-33-24/ USE2024-11-0068

Hat Rentals, LLC 202 N. Walnut Street Parcel: 53-05-33-310-028.000-005 Request: Request for conditional use approval of "student housing or dormitory" to allow one four-bedroom unit in the Mixed-Use Downtown (MD) zoning district. *Case Manager: Jackie Scanlan*

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Auxiliary aids for people with disabilities are available upon request with adequate notice. Please call <u>812-349-3429</u> or E-mail <u>human.rights@bloomingto.in.gov</u>.

The City is committed to providing equal access to information. However, despite our efforts, at times, portions of our board and commission packets are not accessible for some individuals. If you encounter difficulties accessing material in this packet, please contact Melissa

Hirtzel at hirtzelm@bloomington.in.gov and provide your name, contact information, and a link to or description of the document or web page you are having problems with.

PETITIONS:

V-36-24/ VAR2024-12-0053	Tariq Khan 1314 N Lincoln Street Parcel: 53-05-28-300-065.000-005 Request: Variance from side and rear setback standards and a determinate sidewalk variance to allow the conversion of an existing accessory structure to a primary structure by adding a dwelling unit in the structure without changing the existing setbacks and without constructing a new sidewalk in the Mixed-Use Student Housing (MS) zoning district. <u>Case Manager: Gabriel Holbrow</u>
V-38-24/ VAR2024-12-005	Justin Fox 1419 S. Sare Road Parcel: 53-01-55-315-000.000-009 Request: Variance from front setback standards and riparian buffer standards to allow construction of a new detached accessory structure containing a garage and an accessory dwelling unit (ADU) in the Residential Medium Lot (R2) zoning district. <u>Case Manager: Gabriel Holbrow</u>
V-01-25/ VAR2025-01-0058	Paul and Jeanette Smedberg 517 N. Colony Court Parcel: 53-05-36-302-064.000-005 Request: Variance from front setback standards for an attached front-loading carport in the Residential Medium Lot (R2) zoning district. <u>Case Manager: Gabriel Holbrow</u>
V-02-25/ VAR2025-01-0059	Patrick Riggs 2415 W. Fountain Drive Parcel: 53-05-31-100-018.000-005 Request: Variances from accessory dwelling unit (ADU) front setback standard and karst geology standards to allow construction of a new single-family dwelling and conversion of an existing residential structure to an ADU in the Mixed-Use Employment (ME) zoning district. <u>Case Manager: Gabriel Holbrow</u>
V-03-25/ VAR2025-01-0060	David Parsch 1200 N. Lincoln Street Parcel: 53-05-33-201-008.000-005 Request: Variance from side and rear setback standards to allow a vertical addition to an existing detached single- family dwelling structure by adding a second floor with the same setbacks as the existing first floor in the Mixed-Use Student Housing (MS) zoning district. <u>Case Manager: Gabriel Holbrow</u>

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V-04-25/ VAR2025-01-0061

CRMR 2, LLC 3333 E. 3rd Street Parcel: 53-05-35-300-053.000-005 Request: Variance from landscaping standards and front, side, and rear parking setback standards to allow for a 2,403 square foot addition for a "vehicle sales or rental" use in the Mixed-Use Corridor (MC) zoning district. <u>Case Manager: Eric Greulich</u>

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CASE #: V-36-24 / VAR2024-12-0053 DATE: February 20, 2025

PETITIONER/OWNER:	Tariq Khan 201 South College Avenue Bloomington, IN
CONSULTANT:	Dave Kerber, Bloomington Property Services 301 South Cozy Lane Bloomington, IN

REQUEST: The petitioner is requesting a variance from side and rear setback standards and a determinate sidewalk variance to allow the conversion of an existing accessory structure to a primary structure by adding a dwelling unit in the structure without changing the existing setbacks and without constructing a new sidewalk in the Mixed-Use Student Housing (MS) zoning district.

REPORT: The property is located on the east side of North Lincoln Street, between East 17th Street and East 18th Street. The property and all surrounding properties are located in the Mixed-Use Student Housing (MS) zoning district. The petition property and the abutting property to the north (under the same ownership) currently each contain a detached single-family dwelling. All other surrounding properties contain, or soon will contain, residential apartment buildings classified as either multifamily dwellings or student housing or dormitory, including Evolve to the east, the Northern to the south, and Hub II to the west across Lincoln Street (expected to begin construction in the next two or three month).

The property contains an existing accessory structure in the rear yard east of the existing primary structure. The petitioner proposes to remodel the existing accessory structure to convert it into a five-bedroom dwelling unit. After the conversion, the use of the property will be classified as student housing or dormitory, which is an allowed use in this zoning district. However, adding the dwelling unit in the structure changes it from an accessory structure into a primary structure and subjects the structure to all of the standards in the Unified Development Ordinance (UDO) for primary structures.

The existing structure does not meet the side and rear setback standards for primary structures. The minimum side and rear setback is 15 feet in the MS zoning district; the existing structure is set back four and a half feet from the south side property line and five and a half feet from the east rear property line. The petitioner is requesting a variance to keep the existing side and rear setbacks.

Establishing a new primary structure on the property also triggers the requirement in UDO section 20.04.050(d)(2) to provide pedestrian facilities along all street frontages of the property, and the requirement in UDO section 20.04.050(d)(5) that the type of pedestrian facility shall be as indicated in the Transportation Plan. There is currently no sidewalk along the east side of Lincoln Street abutting the property. There is an existing sidewalk immediately to the south of the property; this sidewalk runs along the east side of Lincoln Street from 17th Street but ends at the south

property line of the petition property, approximately 125 feet south of 18th Street. With the establishment of the dwelling in the existing structure, the UDO requires construction of a new sidewalk on the Lincoln Street frontage of the property. The petitioner is requesting a variance to not construct the sidewalk at this time.

As you will see in the proposed findings below, staff recommends that the Board deny both variances. However, if the Board chose to adopt alternate findings and grant the side and rear setback variance, in that case staff would recommend that the Board add a version of the usual condition for variances from dimensional standards:

• The side and rear setback variance is approved only for the existing structure as shown on the submitted site plan.

Additionally, if the Board chose to adopt alternate findings and grant the determinate sidewalk variance, in that case staff would recommend that the Board add the usual condition for determinate sidewalk variances:

• A zoning commitment for the determinate sidewalk variance must be recorded and submitted prior to approval of a building permit.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDINGS:

Side and rear setbacks: Keeping existing side and rear setbacks when the structure is converted into a dwelling unit will not be injurious. Using the existing setbacks will provide less ventilation, less fire separation, and less aesthetic visual separation between buildings than desirable for this location, based on the setback standards for this zoning district. However, the remodel will comply with all minimum standards for building construction and fire protection, and the overall impact on public health, safety, morals, and general welfare will be minimal.

Determinate sidewalk variance: Not constructing a sidewalk along the Lincoln Street frontage of the property at this time will be injurious to the public health, safety, morals, and general welfare of the community. The medium-low volume of vehicle traffic, combined with the continuation of noticeable traffic into the night, indicate that sidewalks on Lincoln Street are necessary for pedestrian safety (determinate sidewalk variance consideration [b]). The new sidewalk would connect to the existing pedestrian network continuing to the south. Even though the sidewalk would not connect to other sidewalks to the north, it would likely not remain disconnected to the north for long because it is likely that the property to the north will undergo some degree of redevelopment in the near future which would trigger the UDO requirement to provide a sidewalk (determinate sidewalk variance consideration [c]).

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDINGS:

Side and rear setbacks: Keeping existing side and rear setbacks when the structure is converted into a dwelling unit will not substantially affect the use and value of neighboring properties. Adding more neighbors and potential noise within close proximity may affect the desirability of the dwelling units in the apartments to the east and south, but any effect will not be significant and is a normal, expected aspect of life and development within the context of this neighborhood.

Determinate sidewalk variance: Lack of a sidewalk along the Lincoln Street frontage of the property will limit access to and from adjacent properties to the north, which currently lack a connection to the sidewalk network.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDINGS:

Side and rear setbacks: No practical difficulty is found in the use of the property. The property has contained one dwelling unit for many years and could continue with one dwelling unit into the future. For a property owner who desires to add a second dwelling unit on the property, moving the existing structure or demolishing it to construct a new dwelling structure or an addition to the house would be more costly than converting the existing structure, but would be feasible and does not create a practical difficulty in the use of the property. There is nothing peculiar about the property related to the available space for side and rear setbacks.

Determinate sidewalk variance: No practical difficulty is found in the use of the property. There are several existing features along the property's frontage which add complications to the design construction of a sidewalk (determinate sidewalk variance consideration [a]). However, the complications do not prevent or otherwise make it impractical to construct a sidewalk.

20.06.080(b)(3)(E)(i)(3) Determinate Sidewalk Variance Approval Criteria:

While not to be included as separate findings of fact, items to consider when determining the practical difficulties or peculiar conditions associated with a determinate sidewalk variance include, but are not limited to:

- [a] That the topography of the lot or tract together with the topography of the adjacent lots or tract and the nature of the street right-of-way make it impractical for construction of a sidewalk; or
- [b] That the pedestrian traffic reasonably to be anticipated over and along the street adjoining such lot or tract upon which new construction is to be erected is not and will not be such as to require sidewalks to be provided for the safety of pedestrians; or
- [c] The adjacent lot or tracts are at present developed without sidewalks and there is no reasonable expectation of additional sidewalk connections on the block in the near future; or
- [d] The location of the lot or tract is such that a complete pedestrian network is present on the other of the street on the same block; or
- [e] Uniformity of development of the area would best be served by deferring sidewalk construction on the lot or tract until some future date.

Review of Determinate Sidewalk Criteria:

- [a] There are several existing features along the property's frontage which add complications to the design construction of a sidewalk, including a water meter, two mature trees (tentatively identified as a silver maple and a Siberian elm), a grade change of approximately three feet between the property's front yard and the front yard of the abutting property to the north, and an open drainage channel / open gutter at the edge of the roadway just north of the property. Although these existing features add complications, they do not appear to prevent or otherwise make it impractical to construct a sidewalk.
- [b] The most recent nearby traffic counts are from for the block of Lincoln Street just to the north between 18th and 19th Streets, counted in April 2010. These counts showed an estimated annual average daily traffic (AADT) of 1,132 vehicles, with daily peaks of more than 80 vehicles, combined northbound and southbound, in the one hour from 5 to 6 pm. As may be expected from the concentration of student housing in the neighborhood, noticeable traffic continues into the late night when the street is dark and pedestrians less visible, with more than 20 vehicles each hour, combined northbound and southbound, until 3 am or later. More than 95 percent of vehicles at all times traveled at speeds of 20 miles per hour or less. To put the traffic volume in context, best practices for street design indicate that shared streets-meaning streets where motor vehicles, bicycles, and pedestrians all share the same road space without curbs or other physical separation—are generally only appropriate for corridors with a low traffic volume of fewer than 1,000 vehicles per day. To put the traffic speeds in context, vehicle speeds greater than 20 miles per hour are considered lethal speeds for pedestrian safety. The 2010 traffic counts showed that the adjacent segment of Lincoln Street experienced a medium-low volume of vehicle traffic with low vehicle speeds. When considering the development of additional housing units in the neighborhood that has occurred since 2010, and anticipated further development in the future, it is reasonable to expect that traffic volumes have increased somewhat since 2010 and will continue to increase, while traffic speeds likely continue to be low. The medium-

low volume of vehicle traffic, combined with the continuation of noticeable traffic into the night, indicate that sidewalks on Lincoln Street are necessary for pedestrian safety.

- [c] The abutting property to the north, also owned by the petitioner, does not currently have a sidewalk along its Lincoln Street frontage. It is likely that the property to the north will undergo some degree of redevelopment in the near future which would trigger the UDO requirement to provide a sidewalk. The properties to the west across Lincoln Street received site plan approval late last year for redevelopment that involves construction of new sidewalks along the west side of Lincoln Street.
- [d] As part of the redevelopment of the properties to the west across Lincoln Street, the developers of that project will provide a new sidewalk from 17th Street through to 19th Street on the west side of Lincoln Street.
- [e] On the one hand, construction of a sidewalk on this property's frontage at this time could serve uniformity of development of the area by coordinating with the construction of new sidewalk on the west side of Lincoln Street, and by continuing the sidewalk that exists to the south. On the other hand, deferral of sidewalk construction on this property's frontage until the abutting property to the north is also required to provide a sidewalk could better implement a connected pedestrian network.

RECOMMENDATION: Based upon the written findings above, the Department recommends that the Board adopt the proposed findings for V-36-24 / VAR2024-12-0053 and deny both requested variances.



Created: 2/13/2025 Map By:



1314 North Lincoln Street Context Aerial



Created: 2/13/2025 Map By:

For use as map information only, information is NOT warranted.

2/4/25

To the members of the Bloomington Zoning Board,

Please accept this written petition regarding variance requests concerning the property located at 1314 N Lincoln St. The variances pertain to the setback for an existing structure and the addition of a sidewalk.

1. Setback Variance:

Bringing the current side setback into compliance would necessitate the demolition of a majority of the existing building to accommodate, which would create an unreasonable financial hardship. The cost of demolition and reconstruction would be prohibitive. The existing building is structurally sound and functional. Maintaining the existing setback has minimal impact on neighboring properties, which are significantly taller and currently share the same setback as the existing structure.

2. Sidewalk Variance:

Installing the requested sidewalk presents significant challenges:

- The city water meter is directly in the sidewalk's path and may require costly relocation/accommodation.
- A mature tree stands in the sidewalk's path and would have to be removed.
- The topography would create a 3-foot drop-off at the end of the sidewalk, with no connecting sidewalk, posing a serious safety hazard.

Please refer to the attached photos for reference.

These factors create a substantial hardship. Compliance would involve significant expense, environmental damage, and the creation of a safety hazard. I believe that granting both variances is justified due to the unique site conditions and the substantial hardships involved. The existing building remains functional, and the proposed sidewalk would be problematic. Granting these variances would not be detrimental to public health, safety, or welfare.

I respectfully request that the Bloomington Zoning Board grant both variance requests. Thank you for your time and consideration.

Sincerely, Tariq Khan

V-36-24 / VAR2024-12-0053, 1314 North Lincoln Street

Photograph submitted by petitioner, 1 of 3



V-36-24 / VAR2024-12-0053, 1314 North Lincoln Street

Photograph submitted by petitioner, 2 of 3



V-36-24 / VAR2024-12-0053, 1314 North Lincoln Street

Photograph submitted by petitioner, 3 of 3



	ГІИЕ	人工义习	2:6	NAIL	
*	63,		PROPOSED RENOVATION STRUCTURE		LINE 4-6
18th ST.		N	23'-6"		PROPERTY LINE
1316 NI LINCOLN		1314 N.LINCOLN			
	:15	רומכסרומ	1		

City of Bloomington Engineering Department 401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

Start Time	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classe	Total
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10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00															
12 PM	0	46	6	0	0	0	0	0	0	0	0	0	0	4	56
13:00	0	63	9	0	1	0	0	0	0	0	0	0	0	0	73
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18:00	0	65	5	0	0	0	0	0	0	0	0	0	0	7	77
19:00	0	68	4	0	2	0	0	0	0	0	0	0	0	2	76
20:00	1	68	2	0	0	0	0	0	0	0	0	0	0	0	71
21:00	0	71	3	0	0	0	0	0	0	0	0	0	0	0	74
22:00	2	64	1	0	0	0	0	0	0	0	0	0	0	3	70
23:00	0	54	0	0	0	0	0	0	0	0	0	0	0	0	54
Total	3	739	49	0	6	0	0	0	0	0	0	0	0	36	833
Percent	0.4%	88.7%	5.9%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	
AM															
Peak Vol.															
PM															
Peak	22:00	17:00	13:00		15:00									15:00	17:00
Vol.	2	76	9		2									8	91

City of Bloomington Engineering Department 401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

For: Multi-way Stop Request Counted By: PK Weather: Warm, sunny

Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	Not	
Time	Bikes	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Classe	Tota
4/29/10	0	29	2	0	1	0	0	0	0	0	0	0	0	0	32
01:00	0	18	1	0	2	0	0	0	0	0	0	0	0	0	21
02:00	0	23	1	0	0	0	0	0	0	0	0	0	0	0	24
03:00	0	9	0	0	0	0	0	0	0	0	0	0	0	0	ç
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	10	0	0	0	0	0	0	0	0	0	0	0	2	12
07:00	0	16	1	0	0	0	0	0	0	0	0	0	0	0	17
08:00	0	26	2	0	2	0	0	1	0	0	0	0	0	1	32
09:00	0	27	4	0	2	0	0	0	0	0	0	0	0	0	33
10:00	0	24	6	0	0	0	0	0	0	0	0	0	0	1	31
11:00	0	42	9	0	3	0	0	0	0	0	0	0	0	1	55
12 PM	0	53	5	0	0	0	0	0	0	0	0	0	0	1	59
13:00	2	43	6	0	1	0	0	0	0	0	0	0	0	7	59
14:00	0	72	8	0	1	0	0	0	0	0	0	0	0	1	82
15:00	1	48	6	0	1	0	0	0	0	0	0	0	0	3	59
16:00	0	70	5	0	1	0	0	0	0	0	0	0	0	4	80
17:00	0	79	11	0	2	0	0	0	0	0	0	0	0	4	96
18:00	0	63	4	0	0	0	0	0	0	0	0	0	0	3	70
19:00	0	65	7	0	1	0	0	0	0	0	0	0	0	3	76
20:00	0	53	0	0	0	0	0	0	0	0	0	0	0	4	57
21:00	3	67	2	0	1	0	0	0	0	0	0	0	0	11	84
22:00	1	60	2	0	1	0	0	0	0	0	0	0	0	14	78
23:00	0	57	1	0	0	0	0	0	0	0	0	0	0	5	63
Total	7	956	83	0	20	0	0	1	0	0	0	0	0	65	1132
Percent	0.6%	84.5%	7.3%	0.0%	1.8%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	
AM		11:00	11:00		11:00			08:00						06:00	11:00
Peak								00.00							
Vol.		42	9		3			1						2	55
PM Peak	21:00	17:00	17:00		17:00									22:00	17:00
Vol.	3	79	11		2									14	96

City of Bloomington Engineering Department 401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

For: Multi-way Stop Request Counted By: PK Weather: Warm, sunny

Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	Not	
Time	Bikes	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Classe	Tota
4/30/10	1	36	7	0	0	0	0	0	0	0	0	0	0	3	4
01:00	0	27	1	0	0	0	0	0	0	0	0	0	0	2	3
02:00	0	21	0	0	0	0	0	0	0	0	0	0	0	7	2
03:00	1	22	3	0	0	0	0	0	0	0	0	0	0	2	2
04:00	0	4	0	0	1	0	0	0	0	0	0	0	0	0	
05:00	0	9	0	0	0	0	0	0	0	0	0	0	0	0	
06:00	0	7	0	0	0	0	0	0	0	0	0	0	0	0	
07:00	0	13	2	0	0	0	0	0	0	0	0	0	0	0	1
08:00	0	20	4	0	0	0	0	0	0	0	0	0	0	4	2
09:00	1	28	7	0	0	0	0	0	0	0	0	0	0	5	4
10:00	0	34	1	0	1	0	0	0	0	0	0	0	0	1	3
11:00	0	39	3	0	0	0	0	0	0	0	0	0	0	3	4
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22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
23:00						*									
Total Percent	3 0.9%	260 81.3%	28 8.8%	0 0.0%	2 0.6%	0 0.0%	27 8.4%	32							
AM Peak	00:00	11:00	00:00		04:00									02:00	00:0
Vol.	1	39	7		1									7	4
PM					I									1	-
Peak															
Vol.															
Grand Total	13	1955	160	0	28	0	0	1	0	0	0	0	0	128	228
Percent	0.6%	85.6%	7.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	

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Northbound															Latitude	: 0' 0.000	Undefined
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
4/28/10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	21	12	1	0	0	0	0	0	0	0	0	0	0	0	34	11-20	17
13:00	24	15	2	0	0	0	0	0	0	0	0	0	0	0	41	11-20	20
14:00	21	10	1	0	0	0	0	0	0	0	0	0	0	0	32	1-10	16
15:00	30	13	1	0	0	0	0	0	0	0	0	0	0	0	44	9-18	23
16:00	15	13	0	0	0	0	0	0	0	0	0	0	0	0	28	11-20	18
17:00	32	15	1	0	0	0	0	0	0	0	0	0	0	0	48	11-20	25
18:00	26	14	1	0	0	0	0	0	0	0	0	0	0	0	41	1-10	20
19:00	21	15	0	0	0	0	0	0	0	0	0	0	0	0	36	11-20	20
20:00	37	5	0	0	0	0	0	0	0	0	0	0	0	0	42	1-10	27
21:00	27	7	0	0	0	0	0	0	0	0	0	0	0	0	34	1-10	20
22:00	28	17	0	0	0	0	0	0	0	0	0	0	0	0	45	11-20	25
23:00	22	7	0	0	0	0	0	0	0	0	0	0	0	0	29	1-10	17
Total	304	143	7	0	0	0	0	0	0	0	0	0	0	0	454		
Percent	67.0%	31.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	20:00	22:00	13:00												17:00		
Vol.	37	17	2												48		

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Start Time 4/29/10	1	16	04														
Time	4 -		21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
4/20/10	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
4/23/10	10	6	0	0	0	0	0	0	0	0	0	0	0	0	16	1-10	10
01:00	5	4	0	0	0	0	0	0	0	0	0	0	0	0	9	*	5
02:00	6	7	0	0	0	0	0	0	0	0	0	0	0	0	13	10-19	12
03:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	*	6
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*	1
06:00	5	3	0	0	0	0	0	0	0	0	0	0	0	0	8	*	5
07:00	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8	*	6
08:00	11	3	0	0	0	0	0	0	0	0	0	0	0	0	14	1-10	10
09:00	10	5	0	0	0	0	0	0	0	0	0	0	0	0	15	1-10	10
10:00	10	4	0	0	0	0	0	0	0	0	0	0	0	0	14	1-10	10
11:00	13	8	0	0	0	0	0	0	0	0	0	0	0	0	21	9-18	11
12 PM	14	12	1	0	0	0	0	0	0	0	0	0	0	0	27	11-20	16
13:00	27	5	0	0	0	0	0	0	0	0	0	0	0	0	32	1-10	20
14:00	28	11	0	0	0	0	0	0	0	0	0	0	0	0	39	1-10	20
15:00	15	13	0	0	0	0	0	0	0	0	0	0	0	0	28	11-20	18
16:00	36	13	0	0	0	0	0	0	0	0	0	0	0	0	49	1-10	26
17:00	29	16	0	0	0	0	0	0	0	0	0	0	0	0	45	11-20	25
18:00	17	19	0	0	0	0	0	0	0	0	0	0	0	0	36	11-20	26
19:00	28	13	0	0	0	0	0	0	0	0	0	0	0	0	41	9-18	21
20:00	24	5	0	0	0	0	0	0	0	0	0	0	0	0	29	1-10	19
21:00	33	15	0	0	0	0	0	0	0	0	0	0	0	0	48	11-20	25
22:00	34	10	1	0	0	0	0	0	0	0	0	0	0	0	45	1-10	24
23:00	28	8	0	0	0	0	0	0	0	0	0	0	0	0	36	1-10	20
Total	396	182	2	0	0	0	0	0	0	0	0	0	0	0	580		
Percent	68.3%	31.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00													11:00		
Vol.	13	8													21		
PM Peak	16:00	18:00	12:00												16:00		
Vol.	36	19	1												49		

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Northbound															Latitude	e: 0' 0.000	Undefined
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
4/30/10 01:00	13 12	6 4	0	0	0	0	0	0	0	0	0	0	0	0	19	1-10 1-10	10
01:00	12	4 5	0	0	0	0	0	0	0	0	0	0	0 0	0 0	16 19	1-10	10 10
			1				0	0			0	0	0	0	19	1-10	
03:00 04:00	7 0	4	0	0	0	0 0	0	0	0	0	0	0	0	0	4	10-19	7
04.00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	8-17	4
05.00	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6	0-17 *	4
07:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	*	4
07:00	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11	*	9
09:00	17	5	0	0	0	0	0	0	0	0	0	0	0	0	22	1-10	12
10:00	8	5	0	0	0	0	0	0	0	0	0	0	0	0	13	*	8
11:00	17	4	0	0	0	0	0	0	0	0	0	0	0	0	21	1-10	12
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	۲ <u>۲</u>	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	107	43	1	0	0	0	0	0	0	0	0	0	0	0	151		
Percent	70.9%	28.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	00:00	03:00												09:00		
Vol.	17	6	1												22		
PM Peak																	
Vol.																	
Total	807	368	10	0	0	0	0	0	0	0	0	0	0	0	1185		
Percent	68.1%	31.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
			5th Percent		4 MPH												
			0th Percent		11 MPH												
			5th Percent		18 MPH												
		9	5th Percent	ile :	20 MPH												
a																	
Stats			I Pace Spe		1-20 MPH												
			Imber in Pa		635												
			ercent in Pa		53.6%												
		er of Vehicl			0												
	Perce	nt of Vehicl			0.0%												
		wean Sp	eed(Averag	je):	11 MPH												

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Southbound	l														Latitude	e: 0' 0.000	Undefined
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
4/28/10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	8	10	4	0	0	0	0	0	0	0	0	0	0	0	22	11-20	15
13:00	3	26	2	1	0	0	0	0	0	0	0	0	0	0	32	13-22	31
14:00	3	15	8	0	0	0	0	0	0	0	0	0	0	0	26	14-23	23
15:00	6	20	4	0	0	0	0	0	0	0	0	0	0	0	30	11-20	25
16:00	8	21	2	0	0	0	0	0	0	0	0	0	0	0	31	11-20	26
17:00	7	30	6	0	0	0	0	0	0	0	0	0	0	0	43	12-21	36
18:00	10	20	6	0	0	0	0	0	0	0	0	0	0	0	36	12-21	26
19:00	5	30	5	0	0	0	0	0	0	0	0	0	0	0	40	11-20	35
20:00	5	19	5	0	0	0	0	0	0	0	0	0	0	0	29	11-20	24
21:00	5	30	5	0	0	0	0	0	0	0	0	0	0	0	40	11-20	35
22:00	6	17	2	0	0	0	0	0	0	0	0	0	0	0	25	11-20	22
23:00	7	15	3	0	0	0	0	0	0	0	0	0	0	0	25	11-20	20
Total	73	253	52	1	0	0	0	0	0	0	0	0	0	0	379		
Percent	19.3%	66.8%	13.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	18:00	17:00	14:00	13:00											17:00		
Vol.	10	30	8	1											43		

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Southbound															Latitude	e: 0' 0.000	Undefined
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
4/29/10	3	9	4	0	0	0	0	0	0	0	0	0	0	0	16	13-22	14
01:00	1	10	1	0	0	0	0	0	0	0	0	0	0	0	12	12-21	12
02:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11	13-22	11
03:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	*	2
04:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*	1
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7-16	1
06:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4	*	3
07:00	4	4	1	0	0	0	0	0	0	0	0	0	0	0	9	12-21	9
08:00	5	12	1	0	0	0	0	0	0	0	0	0	0	0	18	11-20	17
09:00	5	10	3	0	0	0	0	0	0	0	0	0	0	0	18	11-20	15
10:00	7	9	1	0	0	0	0	0	0	0	0	0	0	0	17	10-19	14
11:00	10	20	4	0	0	0	0	0	0	0	0	0	0	0	34	11-20	25
12 PM	7	19	6	0	0	0	0	0	0	0	0	0	0	0	32	12-21	25
13:00	6	18	3	0	0	0	0	0	0	0	0	0	0	0	27	11-20	23
14:00	8	29	6	0	0	0	0	0	0	0	0	0	0	0	43	12-21	35
15:00	15	12	3	1	0	0	0	0	0	0	0	0	0	0	31	11-20	17
16:00	5	23	3	0	0	0	0	0	0	0	0	0	0	0	31	11-20	28
17:00	16	31	4	0	0	0	0	0	0	0	0	0	0	0	51	11-20	37
18:00	5	28	1	0	0	0	0	0	0	0	0	0	0	0	34	11-20	33
19:00	11	20	3	1	0	0	0	0	0	0	0	0	0	0	35	11-20	25
20:00	7	20	1	0	0	0	0	0	0	0	0	0	0	0	28	11-20	25
21:00	10	19	7	0	0	0	0	0	0	0	0	0	0	0	36	13-22	26
22:00	12	17	4	0	0	0	0	0	0	0	0	0	0	0	33	11-20	22
23:00	11	13	3	0	0	0	0	0	0	0	0	0	0	0	27	11-20	18
Total	154	335	61	2	0	0	0	0	0	0	0	0	0	0	552		
Percent	27.9%	60.7%	11.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	00:00												11:00		
Vol.	10	20	4												34		
PM Peak	17:00	17:00	21:00	15:00											17:00		
Vol.	16	31	7	1											51		

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Southbound																e: 0' 0.000	Undefined
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	T	Pace	Number
Time	15	20	25	30	35	<u>40</u> 0	45	50	55	60	65	70	75	999	Total	Speed	in Pace
4/30/10 01:00	7	15 8	6 3	0	0	0	0	0	0	0	0	0	0	0	28 14	12-21 13-22	21 13
01.00	1	о 6	2	0	0	0	0	0	0	0	0	0	0	0	9	13-22	9
02:00	5	8	3	0	0	0	0	0	0	0	0	0	0	0	16	11-20	13
03.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	*	1
05:00	1	6	0	0	0	0	0	0	0	0	0	0	0	0	7	11-20	7
06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7-16	1
07:00	1	7	1	Ũ	0 0	Õ	0	Ő	Ő	Ő	Ő	Ő	Ő	0	9	12-21	9
08:00	7	10	0	0	0	0	0	0	0	0	0	0	0	0	17	11-20	15
09:00	7	11	1	0	0	0	0	0	0	0	0	0	0	0	19	11-20	16
10:00	2	18	4	0	0	0	0	Ō	0	0	0	0	0	0	24	14-23	23
11:00	10	12	2	0	0	0	0	0	0	0	0	0	0	0	24	11-20	17
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00																*	*
Total	45	102	22	0	0	0	0	0	0	0	0	0	0	0	169		
Percent	26.6%	60.4%	13.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	00.00		
AM Peak Vol.	11:00 10	10:00 18	00:00 6												00:00 28		
PM Peak	10	10	0												20		
Vol.																	
Total	272	690	135	3	0	0	0	0	0	0	0	0	0	0	1100		
Percent	24.7%	62.7%	12.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1100		
1 010011	2111/0		5th Percent		10 MPH	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070			
			0th Percent		18 MPH												
			5th Percent		20 MPH												
		g	5th Percent	tile :	24 MPH												
Stats		10 MPI	H Pace Spe	ed: 16	6-25 MPH												
		N	umber in Pa	ce :	825												
			ercent in Pa		75.0%												
			les > 30 MF		0												
	Perce		les > 30 MF		0.0%												
		Mean Sp	eed(Averag	ge):	16 MPH												

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Northbound,	Southbour	nd													Latitude	e: 0' 0.000	Undefined
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
4/28/10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	29	22	5	0	0	0	0	0	0	0	0	0	0	0	56	11-20	31
13:00	27	41	4	1	0	0	0	0	0	0	0	0	0	0	73	11-20	51
14:00	24	25	9	0	0	0	0	0	0	0	0	0	0	0	58	11-20	35
15:00	36	33	5	0	0	0	0	0	0	0	0	0	0	0	74	11-20	43
16:00	23	34	2	0	0	0	0	0	0	0	0	0	0	0	59	11-20	44
17:00	39	45	7	0	0	0	0	0	0	0	0	0	0	0	91	11-20	60
18:00	36	34	7	0	0	0	0	0	0	0	0	0	0	0	77	11-20	44
19:00	26	45	5	0	0	0	0	0	0	0	0	0	0	0	76	11-20	55
20:00	42	24	5	0	0	0	0	0	0	0	0	0	0	0	71	11-20	36
21:00	32	37	5	0	0	0	0	0	0	0	0	0	0	0	74	11-20	49
22:00	34	34	2	0	0	0	0	0	0	0	0	0	0	0	70	11-20	48
23:00	29	22	3	0	0	0	0	0	0	0	0	0	0	0	54	11-20	31
Total	377	396	59	1	0	0	0	0	0	0	0	0	0	0	833		
Percent	45.3%	47.5%	7.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	20:00	17:00	14:00	13:00											17:00		
Vol.	42	45	9	1											91		

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Undefine	e: 0° 0.000	Laliluue													d	Southboun	orthbound,
Numbe	Pace		76	71	66	61	56	51	46	41	36	31	26	21	16	1	Start
in Pac	Speed	Total	999	75	70	65	60	55	50	45	40	35	30	25	20	15	Time
2	11-20	32	0	0	0	0	0	0	0	0	0	0	0	4	15	13	4/29/10
1	11-20	21	0	0	0	0	0	0	0	0	0	0	0	1	14	6	01:00
2	11-20	24	0	0	0	0	0	0	0	0	0	0	0	2	16	6	02:00
	*	9	0	0	0	0	0	0	0	0	0	0	0	0	1	8	03:00
	*	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	04:00
	7-16	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	05:00
	*	12	0	0	0	0	0	0	0	0	0	0	0	0	4	8	06:00
1	1-10	17	0	0	0	0	0	0	0	0	0	0	0	1	6	10	07:00
2	11-20	32	0	0	0	0	0	0	0	0	0	0	0	1	15	16	08:00
2	11-20	33	0	0	0	0	0	0	0	0	0	0	0	3	15	15	09:00
1	11-20	31	0	0	0	0	0	0	0	0	0	0	0	1	13	17	10:00
3	11-20	55	0	0	0	0	0	0	0	0	0	0	0	4	28	23	11:00
4	11-20	59	0	0	0	0	0	0	0	0	0	0	0	7	31	21	12 PM
3	11-20	59	0	0	0	0	0	0	0	0	0	0	0	3	23	33	13:00
5	11-20	82	0	0	0	0	0	0	0	0	0	0	0	6	40	36	14:00
3	11-20	59	0	0	0	0	0	0	0	0	0	0	1	3	25	30	15:00
4	11-20	80	0	0	0	0	0	0	0	0	0	0	0	3	36	41	16:00
6	11-20	96	0	0	0	0	0	0	0	0	0	0	0	4	47	45	17:00
5	11-20	70	0	0	0	0	0	0	0	0	0	0	0	1	47	22	18:00
4	11-20	76	0	0	0	0	0	0	0	0	0	0	1	3	33	39	19:00
3	11-20	57	0	0	0	0	0	0	0	0	0	0	0	1	25	31	20:00
4	11-20	84	0	0	0	0	0	0	0	0	0	0	0	7	34	43	21:00
4	11-20	78	0	0	0	0	0	0	0	0	0	0	0	5	27	46	22:00
3	11-20	63	0	0	0	0	0	0	0	0	0	0	0	3	21	39	23:00
		1132	0	0	0	0	0	0	0	0	0	0	2	63	517	550	Total
			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	5.6%	45.7%	48.6%	Percent
		11:00												00:00	11:00	11:00	AM Peak
		55												4	28	23	Vol.
		17:00											15:00	12:00	17:00	22:00	PM Peak
		96											1	7	47	46	Vol.

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<u>ortnbound,</u> Start	Southboun	16		26	31	26	41	46	51	56	61	66	71	76		e: 0' 0.000 Pace	Numbe
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	in Pac
4/30/10	20	20	<u> </u>	<u> </u>	0	<u> </u>	<u> </u>	0	0	0	0	0	0	<u> </u>	47	<u> </u>	
01:00	15	12	3	0	0	0	0	0	0	0	0	0	0	0	30	11-20	
01:00	15	12	2	0	0	0	0	0	0	0	0	0	0	0	28	11-20	1
02:00	12	12	4	0	0	0	0	0	0	0	0	0	0	0	28	11-20	
03.00	1	4	4	0	0	0	0	0	0	0	0	0	0	0	20 5	10-19	
04.00	1	8	0	0	0	0	0	0	0	0	0	0	0	0	9	11-20	
06:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7	*	
07:00	7	7	1	0	0	0	0	0	0	0	0	0	0	0	15	9-18	
07:00	16	12	0	0	0	0	0	0	0	0	0	0	0	0	28	11-20	1
09:00	24	16	1	0	0	0	0	0	0	0	0	0	0	0	41	11-20	2
10:00	10	23	4	0	0	0	0	0	0	0	0	0	0	0	37	11-20	2
11:00	27	16	2	0	0	0	0	0	0	0	0	0	0	0	45	11-20	2
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Total	152	145	23	0	0	0	0	0	0	0	0	0	0	0	320		
Percent	47.5%	45.3%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	10:00	00:00												00:00		
Vol.	27	23	6												47		
PM Peak																	
Vol.																	
Total	1079	1058	145	3	0	0	0	0	0	0	0	0	0	0	2285		
Percent	47.2%	46.3%	6.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
		1	5th Percent	ile :	5 MPH												
		5	0th Percent	16 MPH													
		8	5th Percent	20 MPH													
		9	5th Percent	22 MPH													
Stats			I Pace Spee		1-20 MPH												
			Imber in Pa		1417												
			ercent in Pa		62.0%												
		er of Vehicl			0												
	Perce	ent of Vehicle	es > 30 MF	νH :	0.0%												
			eed(Averag		14 MPH												

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Start	26-Apr	-10	Τι	le	W	ed	Tł	าน	F	ri	S	at	Sur	า	Week A	verage
Time	Northbound	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo
12:00 AM	*	*	*	*	*	*	16	16	19	28	*	*	*	*	18	22
01:00	*	*	*	*	*	*	9	12	16	14	*	*	*	*	12	13
02:00	*	*	*	*	*	*	13	11	19	9	*	*	*	*	16	10
03:00	*	*	*	*	*	*	6	3	12	16	*	*	*	*	9	10
04:00	*	*	*	*	*	*	0	1	4	1	*	*	*	*	2	1
05:00	*	*	*	*	*	*	1	1	2	7	*	*	*	*	2	4
06:00	*	*	*	*	*	*	8	4	6	1	*	*	*	*	7	2
07:00	*	*	*	*	*	*	8	9	6	9	*	*	*	*	7	9
08:00	*	*	*	*	*	*	14	18	11	17	*	*	*	*	12	18
09:00	*	*	*	*	*	*	15	18	22	19	*	*	*	*	18	18
10:00	*	*	*	*	*	*	14	17	13	24	*	*	*	*	14	20
11:00	*	*	*	*	*	*	21	34	21	24	*	*	*	*	21	29
12:00 PM	*	*	*	*	34	22	27	32	0	0	*	*	*	*	20	18
01:00	*	*	*	*	41	32	32	27	*	*	*	*	*	*	36	30
02:00	*	*	*	*	32	26	39	43	*	*	*	*	*	*	36	34
03:00	*	*	*	*	44	30	28	31	*	*	*	*	*	*	36	30
04:00	*	*	*	*	28	31	49	31	*	*	*	*	*	*	38	31
05:00	*	*	*	*	48	43	45	51	*	*	*	*	*	*	46	47
06:00	*	*	*	*	41	36	36	34	*	*	*	*	*	*	38	35
07:00	*	*	*	*	36	40	41	35	*	*	*	*	*	*	38	38
08:00	*	*	*	*	42	29	29	28	*	*	*	*	*	*	36	28
09:00	*	*	*	*	34	40	48	36	*	*	*	*	*	*	41	38
10:00	*	*	*	*	45	25	45	33	*	*	*	*	*	*	45	29
11:00	*	*	*	*	29	25	36	27	*	*	*	*	*	*	32	26
Lane	0	0	0	0	454	379	580	552	151	169	0	0	0	0	580	540
Day	0		0		833	3	113		320		0		0		112	
AM Peak							11:00	11:00	09:00	00:00					11:00	11:00
Vol.							21	34	22	28					21	29
PM Peak					17:00	17:00	16:00	17:00							17:00	17:00
Vol.					48	43	49	51							46	47
Comb Tota		0		0		833		1132		320		0		0		1120
AD	т	ADT [·]	1,132	A	ADT 1,132											

PETITIONER/OWNER: Justin Fox 1419 South Sare Road Bloomington, IN

REQUEST: Petitioner is requesting variances from front setback standards and riparian buffer standards to allow construction of a new detached accessory structure containing a garage and an accessory dwelling unit (ADU) in the Residential Medium Lot (R2) zoning district.

REPORT: The property is located at the northeast corner of East Moores Pike and the short culde-sac segment of South Sare Road, just to the west of the large intersection where East Moores Pike meets South College Mall Road and its continuation as South Sare Road to the south. The property is located in the Residential Medium Lot (R2) zoning district and contains a detached single-family dwelling. Surrounding properties to the north and west on the cul-de-sac segment of Sare Road are also in the R2 zoning district and also contain detached single-family dwellings. The abutting property to the east on College Mall Road is located in the Residential Multifamily (RM) zoning district and contains multifamily dwellings known as Gentry Quarters Condominiums. The adjacent property across Moores Pike to the south is located in the Renwick Planned Unit Development (PUD) and contains multifamily dwellings. A portion of the east side of the property is within the regulated floodplain along a headwaters stream of Jackson Creek.

The petitioner proposes to construct an accessory structure on the property. The new structure would contain a garage on the ground floor and an accessory dwelling unit (ADU) in an upper story. The Unified Development Ordinance (UDO) establishes a minimum front setback for a detached garage of ten feet behind the primary structure's front facade. Additionally, the minimum front setback for a detached ADU is no closer to any street than the existing primary dwelling structure. The proposed structure complies with both front setback standards from Sare Road to the west, but does not comply with either standard from Moores Pike to the south. The petitioner is requesting a variance from the front setback standards as they apply to this structure from the south front property line along Moores Pike.

The stream on the east side of the property means that development on the property must comply with riparian buffer standards in the UDO. Additionally, any development within the regulated floodplain adjacent to the stream must be approved by a floodplain development permit and comply with floodplain standards in the UDO. The petitioner has located the proposed accessory structure to stay fully out of the regulated floodplain and to avoid all land disturbance within 25 feet of the stream. However, the proposed location of the new structure as well as the location of the existing house are within 75 feet of the stream, which is the regulated riparian buffer distance.

The UDO's riparian buffer standards include a set a three graduated buffer zones, each 25 feet wide: streamside zone (zone 1), intermediate zone (zone 2), and fringe zone (zone 3). The streamside zone is the most restrictive of disturbance, but building construction is prohibited in all zones. All together, the buffer zones create a 75-foot buffer from the center of the street where building construction is not allowed. Applied strictly to this property, these buffer zones would prohibit the construction of a new accessory structure anywhere within 75 feet of the stream. Furthermore, strict application of the UDO would mean that construction of a new accessory structure anywhere to establish a riparian buffer easement that overlaps with portions of the existing house. Even though there is nothing to trigger compliance for the existing house, it would not be possible to establish the required riparian easements without removing or relocating the existing house.

The riparian buffer standards include an exception for lots of record of less than one-half acre in size so that these lots only have to comply with the streamside zone and are exempt from the intermediate zone and fringe zone. In effect, these excepted lots have a 25-foot buffer instead of a 75-foot buffer. The exception does not apply to this property in part because at 1.1 acres it is more than one-half acre in size. The petitioner is requesting a variance from the intermediate zone and fringe zone riparian buffers in order to have buildable area for the proposed accessory structure. The petitioner intends to comply with the requirements of the 25-foot streamside zone riparian buffer.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDINGS:

Front setback: The proposed location of the new accessory structure will not be injurious to the public health, safety, morals, and general welfare of the community. Although the south property line along Moores Pike is technically a frontage, the property gains access only from Sare Road to the west and is visually oriented only toward Sare Road. The proposed accessory structure complies with front setback standards from Sare Road. The proposed accessory structure is set back more than 50 feet from Moores Pike.

Riparian buffer: Relief from intermediate zone and fringe zone riparian buffers on the property will not be injurious to the public health, safety, morals, and general welfare of the community. Maintaining a 25-foot steamside zone riparian buffer and abiding by standards for development within the regulated floodplain will be adequate to preserve the natural absorption and drainage managament capacity of the stream, prevent erosion, reduce flood risk, and maintain habitat and connectivity corridors for wildlife in the urban environment.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDINGS:

Front setback: The proposed location of the new accessory structure will not substantially affect adjacent properties. The proposed accessory structrure complies with front setback standards from Sare Road and is set back more than 50 feet from Moores Pike.

Riparian buffer: Relief from intermediate zone and fringe zone riparian buffers on the property will not substantially affect adjacent properties. Maintaining a 25-foot steamside zone riparian buffer and abiding by standards for development within the regulated floodplain will be adequate to preserve the natural absorption and drainage managament capacity of the stream, prevent erosion, and reduce flood risk for neighboring properties along the stream.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

Front setback: Practical difficulty is found in the limited buildable area available for an accessory structure on the lot outside of required front yards, all required riparian buffer zones, and the regulated floodplain. Because of the existing location of the existing house, the only location for an accessory structure which fully complies with front setback standards is immediately east of the house, which is within required riparian buffers and close to the regulated floodplain.

Riparian buffer: Practical difficulty is found in the limited buildable area for any structure on the lot outside of all required riparian buffer zones and the regulated floodplain. The location of the stream along the longer north-south dimension of the property shape is a peculiar feature that maximizes the area encompassed by the riparian buffer zone compared to otherwise similar lots that may have a stream at a property corner or along a shorter dimension of the property shape. Relief from the intermediate zone and fringe zone riparian buffers on the west side of the stream is adequate to provide buildable area of similar size to other propeties in the immediate neighborhood. Strict application of only the streamside zone riparian buffer would provide adequate buildable area and would not result in practical difficulties in the use of the property.

RECOMMENDATION: Based upon the written findings above, the Department recommends that the Board of Zoning Appeals adopt the proposed findings for V-38-24 / VAR2024-12-0055 and grant the requested variance with the following conditions:

- 1. This variance approves the proposed location of the accessory structure as shown in the submitted site plan. Minor changes to the size, shape, and location of the structure that arise during architectural design review or actual construction shall be considered consistent with this variance approval so long as the structure complies with all size standards applicable to an accessory structure and a detached ADU, complies with front setback standards from Sare Road to the west, is completely outside the 25-foot streamside zone riparian buffer and regulated floodplain to the east, and is located at least 50 feet from Moores Pike to the south.
- 2. This variance grants relief from the requirements of the intermediate zone and fringe zone riparian buffers on the west side of the stream adjacent to the property. The property remains subject to all requirements related to the 25-foot streamside zone riparian buffer on both sides of the stream as well as the requirements of all riparian buffer zones on the east side of the stream in the case that any portions of the property extend more than 25 feet east of the stream. The property remains subject to all floodplain development standards.
- 3. Prior to issuance of a certificate of zoning compliance for any building construction on the property, the property owner shall record an easement in a form approved by the Planning and Transportation Department and in accordance with UDO section 20.04.030(f)(3) that covers all land on the lot within 25 feet west of the stream and within 75 feet east of the stream.



For use as map information only, information is NOT warranted.



1419 South Sare Road Context Aerial



Zoning District Boundary

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February 5, 2025

Justin Fox Fox Property and Development LLC 1419 South Sare Road Bloomington, IN 47401

To: Board of Zoning Appeals

Justin Fox is requesting a variance to build a garage/ADU at his home located at 1419 South Sare road. I have worked with Gabriel Holbrow with the city of Bloomington planning department and Dan Neubecker of BRCJ on this project to find a good suitable placement for the building. Due to the constraints of the property I'm asking for a variance to put the structure inside the 75 foot riparian buffer but outside the 25 foot buffer most lots are required to use and place the building in the front of my existing home seeming it can not go behind. Thank you for consideration

Sincerely yours,

Justin Fox




Fwd: Sare Rd project

2 messages

Justin fox <foxtrading1@gmail.com> To: Gabriel Holbrow <gabriel.holbrow@bloomington.in.gov>

Fri, Feb 14, 2025 at 11:13 AM

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I think that you said that it was too late to add this to the packet although I still wanted to forward to you. Thank you Justin O. Fox 773-454-9538 Fox Property and Development LLC 422Washington.com FoxBloomington.com

Begin forwarded message:

From: "Bomba Sr., Chris" <CBomba@rwbaird.com> Date: February 14, 2025 at 11:09:40 AM EST To: Justin fox <foxtrading1@gmail.com> Subject: Sare Rd project

Justin,

Thank you for taking time to discuss what you are planning to build at your home on Sare rd. I am trustee over my father's house at 1333 Sare rd. as you know he still lives there and has since 1966. I have discussed your "ancillary dwelling unit" project with him, as well as all the beneficiaries of the trust, my brothers. We all support what you are building, and we all believe it will enhance the look and feel of your home and the neighborhood.

Since my parents were the original developers of that neighborhood, we know a lot of the history of your home. If you or anyone at the city have any questions, I would be happy to answer them. Good luck with your project.

Chris Bomba Sr., AAMS®,

Director

Financial Advisor

Private Wealth Management

Baird

121 N. Pete Ellis Dr., Suite 101 Bloomington, IN 47408

(o) 812.332.6333 | 800.790.6333 | 812.323.3154 fax

cbomba@rwbaird.com | rwbaird.com | https://www.bombastallsmithrabadi.com/



The Bomba Stallsmith Rabadi Group : Yaz Rabadi, Rene Blubaugh, JR Stallsmith, Jenna Barker, Chris Bomba, Sr.



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Gabriel Holbrow <gabriel.holbrow@bloomington.in.gov> To: Justin fox <foxtrading1@gmail.com> Fri, Feb 14, 2025 at 1:44 PM

Dear Justin Fox,

We are compiling the packet for posting at this very moment, so there is time to include this letter. Today is well past the deadline to revise your petition, but if we had received a letter directly from a member of the public or other interested party with this timing (that is, before the packet was actually posted), we would include it in the packet. Therefore, treating this as a letter from the public, I will include it in the packet.

Gabriel



PETITIONER/OWNER:	Paul and Jeannette Smedberg 517 North Colony Court Bloomington, IN
CONSULTANT:	Russ Herndon, Russ Herndon Design 4413 Watson Road Nashville, IN

REQUEST: Petitioner is requesting a variance from front setback standards for an attached frontloading carport in the Residential Medium Lot (R2) zoning district.

REPORT: The property is located on the cul-de-sac end of North Colony Court in the Park Ridge East neighborhood. The property is located in the Residential Medium Lot (R2) zoning district and contains a detached single-family dwelling. All surrounding properties are also in the R2 zoning district and also contain detached single-family dwellings.

The petitioner proposes to construct a carport canopy over the existing driveway in the front yard of the house. The canopy would be extend approximately 21 feet from the front wall of the house toward the cul-de-sac. The minimum front setback required for attached garages and carports in the R2 zoning district is 10 feet behind the primary structure's front building wall. The petitioner is requesting a variance from this requirement.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) *The approval will not be injurious to the public health, safety, morals, and general welfare of the community.*

PROPOSED FINDING: Approval of the requested variance will be injurious to the general welfare of the neighborhood and community by altering the aesthetics of the streetscape from one defined by features for people, including doors and windows, to one with more features for automobiles, such as this carport.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING: Approval of the requested variance will result in adverse impacts to the use and value of surrounding properties by reducing the aesthetic quality of the subject property's frontage when viewed from the public street.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING: No practical difficult is found related to area for parking vehicles. Because the UDO does not have any minimum parking requirement for detached single-family dwellings or any requirement that vehicle parking be covered, the parking area available in the existing driveway is consistent with the expectations for this use. There is nothing peculiar about the property related to area for parking vehicles. The house was originally constructed with an attached garage, which the property owner has chosen not to use for vehicle parking. The existing large hemlock trees on the east side of the house do not prevent use of the existing driveway for parking, and also could lawfully be removed to make room for additional parking area if so desired.

RECOMMENDATION: Based upon the written findings above, the Department recommends that the Board of Zoning Appeals adopt the proposed findings for V-01-25 / VAR2025-01-0058 and deny the requested variance.







Petitioner's Statement

Paul & Jeannette Smedberg 517 N Colony Court, 47408

Case #V-01-25 / VAR2025-01-0058

The project that we've been hoping to start this year is adding a carport to the front of our house. We initially started thinking about this about a year ago, and our goal from the beginning has been to come up with a simple, clean, functional design that is integrated with the design of our house. As we worked further on the ideas, we also realized that having a carport with space to add more solar panels would help us achieve our longer-term goal of meeting all of our electric usage needs as we gradually switch all our large appliances (furnace, water heater, and stove) from gas to electric. We have no more room on our roof for more panels, and we are currently almost exactly matching our usage over the course of a year.

So that's the plan in a nutshell.

We want the carport to be in/over the existing driveway because there really is no location at the side of the house or access to the back of the house. The only side access is between an existing narrow shed and a row of large Eastern Hemlock trees that grow along the property line. There is no access on the other side of the house. Keeping the carport close to the house means it won't extend way out into the driveway.

To do this right, we really needed to hire an experienced architectural designer to come up with a way to integrate the carport with the existing house. We've seen many of Russ Herdon's mid-century-modern designs around town (including on a house similar to ours just one cul-de-sac over), and have hired him to not only design the carport, but also to look at the front of our house and make it all work together to improve the look of our house and keep it in line with the overall design of our neighborhood.

Our cul-de-sac is small, and we have already talked with many of our neighbors about our plans. We've gotten nothing but positive feedback. The neighbors immediately east of our house, who share ownership of the Hemlock trees, will be the ones most concerned with the health of those trees. They have no concerns about us adding a carport, and are happy for us.

Lastly, I have found examples throughout the neighborhood of garages and porches that extend out from the front of the house, into the driveway and towards the street. We would not be the first. We are striving to create a structure that will add the functionality of a carport, give us more solar panels, improve the look of our house, and will still follow the look and feel of other houses throughout our neighborhood.

Thank you for considering our request.



4029 E Providence Ct



4016 E Providence C



514 N Plymouth Rd



4510 E Sheffield Dr



237 N Sheffield Dr



1712 E Ruby Ln

Norman Arbor Care & Gardens 4943 South Shore Drive Nashville, IN 47448 normanarborcare@gmail.com normanarborandgardens.com



November 25, 2024

517 North Colony Court Bloomington, IN 47408

Dear Homeowner,

I assessed the group of Eastern Hemlock trees located on the Northeast side of the property bordering the neighbor's driveway. Disturbance within the critical root zone (i.e. excavation, the use of heavy equipment over the root zone, etc.) is likely to be detrimental to the health and vitality of the trees. In this case, the critical root zone is 12 feet from the trunk of each tree in all directions.

Furthermore, I observed that two of the trees are in declining health and potentially suffering from an infestation of Conifer Bark Beetle. I recommend treating these trees for continued preservation. Please contact me via the <u>"contact" form</u> on my website if you are interested in discussing further.

Thank You,

Andrew Norman

ISA Certified Arborist IN-3474A

ISA Qualified Tree Risk Assessor

TCIA Qualified Plant Health Care Technician



Variance petition

1 message

Gabriel Holbrow <gabriel.holbrow@bloomington.in.gov>

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Leah Sinn <leahbethsinn@hotmail.com> Mon, Jan 27, 2025 at 1:31 PM To: "gabriel.holbrow@bloomington.in.gov" <gabriel.holbrow@bloomington.in.gov>, Jeannette Brown Smedberg <jtbsmedberg@gmail.com>, "Peter Iversen (via Google Docs)" <peterjamesiversen@gmail.com>

Dear Mr. Holbrow,

My husband and I are writing to you in reference to Variance petition V-01-25 / VAR2025-01-0058, 517 N Colony Ct. We are neighbors directly to the west of the Smedburgs at 518 N Colony Ct. We are in favor of their request and have no issues with how it will affect the property.

Please let us know if you need any other information or have questions.

Sincerely,

Leah Sinn Iversen (812)320-2017 Peter Iversen (812)345-7486

Sent from Outlook



Support for variance of Brown/Smedburg

jan.skinner1@att.net <jan.skinner1@att.net>

To: gabriel.holbrow@bloomington.in.gov

Mon, Jan 27, 2025 at 2:45 PM

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Mr. Holbrow

As a long-term neighbor of Jeannette and Paul I support their variance to add carport to their residence on Colony Court. Details are in her email to me seen be?ow.

Adding a solar roof to their home in the past year shows their concern for the environment. Both are intelligent and interesting neighbors and very supportive of community concerns. They would not ask for variance if not absolutely necessary. They are using an architect to define the best alternative and have the support of neighbors.

Please grant the variance at your first opportunity.

You may contact me at the above email address should you have concerns.

Thank you Janice Skinner 510 N Colony Court

----- Forwarded Message -----From: Jeannette Brown Smedberg <jtbsmedberg@gmail.com> To: "jan.skinner1@att.net" <jan.skinner1@att.net> Sent: Friday, January 24, 2025 at 10:32:57 AM EST Subject: Re: Favor to ask!

Thank you!

I think email would probably be fine --- the guy we're working with at the planning department is Gabriel Holbrow <gabriel.holbrow@bloomington. in.gov>

You should probably use the following for reference so it gets attached to our file:

Variance petition V-01-25 / VAR2025-01-0058, 517 N Colony Ct

Or if you'd rather mail, you could just send it to me directly.

Thanks so much, Jan! Jeannette

PS: we still have several inches of snow on the ground!

On Fri, Jan 24, 2025 at 10:26 AM <jan.skinner1@att.net> wrote: Do you have email address or do I need to mail? If so what is address? Yes I will send message

On Friday, January 24, 2025 at 10:19:53 AM EST, Jeannette Brown Smedberg <a>jtbsmedberg@gmail.com wrote:

Hi Jan, and Maggie and Dan

I was wondering if I could ask you a favor of you. Our designer, Russ Herndon, thinks if we could get a short letter of support from our closest neighbors for our carport plan that it might just get us approval for our variance. I've separately written Leah and Peter, because they are the ones directly affected by the position of our planned structure, but having a letter from you would also help our case.

Just so you have the whole picture, the reason we need a variance is twofold: one is that the carport would extend forward from the house (duh) into the normal setback zone for our neighborhood. I've also sent the city pictures of other places in the neighborhood where that variance was granted.

The other is that because of the angle of our driveway, the structure would end up closer to the Iversen's shared property line than is normally allowed. Peter and Leah are aware of this, and are not concerned about the placement or the distance to their property/driveway. I'm also attaching a more accurate drawing showing where the new structure would be located.

If you have any questions, please let me know. We would be grateful for your help!

Thanks, Jeannette and Paul

BLOOMINGTON BOARD OF ZONING APPEALS STAFF REPORT Location: 2415 West Fountain Drive

CASE #: V-02-25 / VAR2025-01-0059 DATE: February 20, 2025

PETITIONER/OWNER:	Patrick Riggs
	2415 West Fountain Drive
	Bloomington, IN

REQUEST: The petitioner is requesting variances from the accessory dwelling unit (ADU) front setback standard and karst geology standards to allow construction of a new single-family dwelling and conversion of an existing residential structure to an ADU in the Mixed-Use Employment (ME) zoning district.

REPORT: The property is located on the west side of the intersection where North Lemon Lane meets West Fountain Drive. The property and all surrounding properties are located in the Mixed-Use Employement (ME) zoning district. Surrounding properties are characterized by a low density of development with a mix of residential and commercial uses. The area is also charactized by karst geology, including several sinkholes. There is a compound karst feature encompassing two sinkhole depressions to the west and southwest of the property.

The property contains an existing 760-square-foot detached house at the north end of the property on Fountain Drive. The petitioner proposes to construct a new detached single-family house on the east side of the property near Lemon Lane. The petitioner proposes to retain the existing dwelling structure without modification, but reclassify it as an detached accessory dwelling unit (ADU), accessory to the new main house. The petitioner is requesting two variances to allow the construction of the new main house.

First, the petitioner is requesting a variance from the front setback standard for an ADU. The existing residential structure is compliant with standards in the Unified Development Ordinance (UDO) for an ADU except for the required front setback. The UDO requires that an detached ADU not extend closer to any street than the primary dwelling structure. The existing structure (proposed ADU) is set back 8 feet from the front property line along Fountain Drive, while the new main house is proposed to be set back 40 feet from the front property line along Fountain Drive. Even if the new main house were relocated to the minimum front setback of 15 feet, the front setback of the ADU would be less. The Transportation Plan calls for a 60-foot right-of-way width for this segment of Fountain Drive, but the existing width of the public right-of-way is at least 16 feet less than that, estimated at 40 feet wide. If the Fountain Drive right-of-way were ever widened to the full 60 feet called for in the Transportation Plan, the existing structure (proposed ADU) would encroach at least slightly into the public right-of-way. However, there is no requirement that this property dedicate additional right-of-way width at this time, the City is not currently pursuing acquisition of additional right-of-way width on this street segment, and there is no expectation that the right-of-way will be widened in the near future. Furthermore, because Fountain Drive is classified as the neighborhood residential street typology, the front setback standard in the UDO is properly measured from the existing edge of right-of-way in this case, not the proposed rightof-way.

Second, the petitioner is requesting a variance from karst geology standards to construct the new main house and locate a septic field within the last closed contour of the compound karst feature. When building on a property subject to karst geology standards, the UDO requires that a karst conservancy easement be established for all area within 25 feet horizontally from the last closed contour around a karst feature. All land-disturbing activity is prohibited within the karst conservancy easement. Additionally, the UDO prohibits structures within 10 feet of the easement, effectively establishing a 35-foot building setback from the last closed contour. The petitioner has submitted documentation showing that the last closed contour which encompasses both sinkhole depressions in the compound karst feature is at the elevation of 866 feet. The proposed new main house and the septic field both overlap the 866-foot contour, with significant portions of each within the required buffer.

As you will see in the proposed findings below, staff recommends that the Board deny both variances. However, if the Board chose to adopt alternate findings and grant the karst geology variance, in that case staff would recommend that the Board add a condition that clarifies where exactly the required karst conservancy easement shall be located, if not 25 feet from the 866-foot contour.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDINGS:

ADU front setback: Keeping the front setback of the existing structure will not be injurious to the public health, safety, morals, or general welfare of the community. The structure has stood in its current location for nearly a century with no known adverse effects. The structure encroaches slightly into the proposed right-of-way per the Transportation Plan, but there is no reasonable expectation that the existing right-of-way will be widened in the near future.

Karst geology: Locating a septic field and constructing a house within the required buffer from a karst feature will be injurious to the public health, safety, and general welfare by increasing the structural risk to the building, increasing the risk of water contamination, and increasing the potential drainage flow through the karst feature, potentially leading to accelerated soil piping and subsidence.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDINGS:

ADU front setback: Keeping existing the front setback of the existing structure will not substantially affect adjacent properties. The structure has stood in its current location for nearly a century with no known adverse effects.

Karst geology: Locating a septic field and constructing a house within the required buffer from a karst feature will adversely affect adjacent properties by increasing the structural risk to existing buildings near the karst feature, increasing the risk of water contamination, and increasing the potential drainage flow throught the karst feature, potentially leading to accelerated soil piping and subsidence.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDINGS:

ADU front setback: It is infeasible to move the existing structure because of its structural condition. Even if relocation to elsewhere on the property were feasible, the limited buildable area on the property due to the karst geology and need for a septic system make it difficult to find room for both a detached ADU and a primary dwelling structure. However, these constrainst do not result in practical difficulties in the use of the property. The property owner has numerous UDO-compliant options, including mainting the existing structure as the primary dwelling, building a large rear addition onto the existing structure to add living space, or removing the existing structure to construct a larger new primary dwelling structure.

Karst geology: No practical difficulty is found in the use of the property. The presence of karst features adjacent to the property is peculiar compared to other properties in general, but is not peculiar for properties subject to karst geology standards. A certain degree of practical difficulty resulting from the karst geology standards can be considered anticipated and expected by the UDO for any property adjacent to karst features. The degree of practical difficulty for this property is not peculiar or extreme compared to similar properties near karst. Although the UDO's required buffer from the karst feature renders a significant portion of the property unbuildable, there remains more than 9,000 square feet of buildable area outside required setbacks from karst and property lines.

RECOMMENDATION: Based upon the written findings above, the Department recommends that the Board adopt the proposed findings for V-02-25 / VAR2025-01-0059 and deny both requested variances.



2415 West Fountain Drive

Location Map



Petitioner's Statement

To: Board of Zoning Appeals (BZA) Subject: Request for Variances for ADU Front Setback and Karst Geology Standards

Dear Members of the Board,

I am requesting approval for variances related to the construction of a four-bedroom singlefamily dwelling and the conversion of the existing residential structure into a one-bedroom accessory dwelling unit (ADU) on my property at 2415 W Fountain Dr., Bloomington, IN 47404, located within the Mixed Use Employment (ME) zoning district.

Requested Variances

- Primary Dwelling Placement & Front Setback Variance UDO section
 20.03.030(g)(5)(E)iii. states that an ADU cannot extend closer to any street than the primary dwelling structure.
 - The existing structure, which will be converted into an ADU, is grandfathered in at 8 feet from the property line along Fountain Dr. under current zoning regulations, whereas current zoning requires a 15-foot setback for new structures.
 - Because of the pre-existing structure's placement, a variance is required to allow the new primary dwelling to be positioned behind the existing structure.
 - Due to the corner lot placement, the new primary dwelling will technically be closer to Lemon Lane than the converted ADU. Both structures are oriented to face Lemon Lane, ensuring a consistent streetscape and functional site design despite the Fountain Dr. address.
- Variance from Karst Geology Standards UDO section 20.04.030(f)(4) establishes the karst conservancy easement requirements.
 - A professional geological assessment has confirmed that the proposed building footprint does not contain obvious karst development, soil piping, or ground subsidence.
 - The findings support that the proposed site is stable and suitable for development, and the submitted documentation supports compliance.
- Additionally, while a documented private force main exists in front of my property, no municipal sewer access is available. UDO section 20.06.040(d)(6)(B)iii.2. states that municipal sewer and water hookup are required unless an exception is granted by the City Utilities Department and County Health Department. Given that no sewer connection has been possible during past attempts at connection, I have secured necessary approvals and hold a valid five-bedroom septic permit (WW-23-296) to accommodate both the existing and new structures.

The existing structure, which will be converted into an ADU, was constructed in 1929 and is listed on the **Bloomington Historic Sites and Structures List as 105-055-35566 - 2415 Vernal Pike (now W. Fountain Dr.)**. While the structure is classified as non-contributing, it remains a notable example of a 1920s-style bungalow, representative of the era's architectural character.

The structure sits on its original limestone foundation, which includes a partial basement, making relocation structurally not viable. Preserving the structure in its current location is the only viable way to maintain its architectural integrity and community value. The planned location for the new single-family dwelling has been selected as the most suitable on the lot based on elevation data and site conditions, as demonstrated in the submitted site plans. This placement minimizes environmental disruption, avoids geological hazards, and ensures safe and functional use of the property. A professional geological assessment confirmed that no obvious signs of karst development were observed in the proposed building footprint. The study further indicates that the property does not contain any direct sinkhole features, reinforcing that the selected site is stable and suitable for construction. These findings are verified by the geological assessment document submitted with this statement.

Justification for Approval

Practical Difficulty

- Existing Setback Conflict
 - The existing structure is only 8 feet from the property line along Fountain Dr., whereas current zoning requires a 15-foot setback.
 - **UDO section 20.03.030(g)(5)(E)iii.** establishes that an ADU cannot extend closer to any street than the primary dwelling structure.
 - The new primary dwelling cannot be located in front of or closer to the road than the existing structure, requiring a variance to allow for the planned placement.

• Pre-Existing Conditions

- The existing structure (to be converted into an ADU) was built in 1929, long before modern zoning setbacks were enacted.
- The structure sits on its original limestone foundation, which includes a partial basement, making relocation impossible.
- Its placement is a pre-existing condition, and demolishing or relocating the structure would erase an architecturally and historically significant home while imposing an undue financial burden.

Geological Constraints

- **UDO section 20.04.030(f)(4)** establishes the karst conservancy easement requirements.
- A professional geological assessment determined that the proposed building footprint does not contain obvious karst development, soil piping, or ground subsidence.

- The findings support that the proposed site is suitable for development, and the submitted documentation provides further assurance regarding stability.
- Lack of Sewer Access & Valid Septic Approval
 - While a force main is documented in front of my property, no municipal sewer connection is available.
 - **UDO section 20.06.040(d)(6)(B)iii.2.** requires sewer hookup unless an exception is granted.
 - The necessary exception was granted, and I hold an approved five-bedroom septic permit **(WW-23-296)** to support the property.

Architectural & Community Compatibility

- The existing structure contributes to the character of the area, even though it is non-contributing.
- There are other historic structures nearby, and maintaining this home preserves the neighborhood's visual continuity.
- The new primary dwelling is intentionally designed to complement the existing residential aesthetics in the Mixed-Use Employment district.
- The two structures together will create a cohesive and historically sensitive streetscape, enhancing the community's overall architectural integrity.

Impact on Neighboring Properties & Community Benefit

- Minimal Drainage Impact:
 - Water naturally drains away from adjacent populated properties, meaning the placement of the new primary dwelling will not alter drainage conditions for neighboring lots.
- No Proximity Issues with Adjacent Properties:
 - My property is separated from all adjacent properties by either a roadway or a section of woods:
 - North & East: Separated by Fountain Dr. & Lemon Ln.
 - South & West: Separated by a wooded section.
 - The closest structure on a neighboring lot is 127 feet to the North, across Fountain Dr., from the proposed new primary structure location.
 - The requested variances will not impact privacy, sightlines, or property access for neighbors.

Increased Safety & Stability in the Community

- This residential presence in a mixed-use area provides a visual deterrent against potential crime during non-business hours, benefiting nearby businesses.
- Having a family home occupied in this area adds stability, community engagement, and passive security for the surrounding neighborhood.

Public Benefit of Granting These Variances

Approving this request aligns with Bloomington's broader planning goals by:

- Preserving a 1920s architectural bungalow, contributing to the neighborhood's historical character.
- Encouraging responsible infill development, ensuring land is used efficiently without disrupting community dynamics.
- Minimizing environmental impact.
- Enhancing neighborhood safety and community stability by ensuring a residential presence in a mixed-use area, supporting both local businesses and long-term residents.

I respectfully request the Board's approval of these variances to allow for the construction of the new single-family dwelling and the preservation of the existing structure as an ADU.

Sincerely, Patrick Riggs 2415 W Fountain Dr. Bloomington, IN 47404 digital riggsp@yahoo.com \$12-345-1761







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PLAN NO. HPR-2109 DESIGNER: DRAFTSPERSON: DATE: 8-16-2017 REVISED: 10-8-2017 SHEET NO. 2 Copyright 2016

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NOTE: 6" EXTERIOR WALLS, TYP.

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FULL WALL SECTION PLAN NO. HPR-2109



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PLAN NO. HPR-2109 DESIGNER:_____ DRAFTSPERSON:____ DATE:_____16-2017 REVISED:_10-8-2017

SHEET NO.

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12 #240 LB ASPHALT SHINGLES OR ROOFING SPECS 8 OR ABOVE 15# LB FELT 1/2" CDX PLYWOOD SHEATHING W/ PLYWOOD CLIPS · CONV. FRAMING OR TRUSSES PER PLANS OVERHANG PER PLANS ANCHOR STRAPS AT EACH RAFTER OR PER LOCAL CODE 2 x 4 PLATE 2 x SHOE BLOWN INSULATION EQUAL TO R-30 SHINGLE MOULD CEILING JOIST PER PLAN FINISH FLOOR TO SPECS 26 GAUGE GALVANIZED IRON GUTTER 4 - 2 x BLOCKING FLOOR JOIST PER PLAN 1/2" GYPSUM BOARD OR INTERIOR FINISH PER BUILDER'S SPECS 1 x 8 FASCIA (1 x 6 WHEN TRUSSES ARE USED) TRIPLE 2 x 6 TREATED SILL 2 x 4' s @ 32* O.C. 4" CAP BLOCK ANCHOR STRAPS PER LOCAL CODE - 3/8" EXTERIOR PLYWOOD W/ SCREENED VENTS CONTINUOUS GRADE EXTERIOR FINISH PER BUILDERS SPECS CROWN MOULD 1/2" RODS @ 8'-0" O.C. 78 1 x FRIEZE BOARD 8" CONCRETE BLOCK #6 MIL POLY VAPOR BARRIER FINISH FLOOR TO SPECS FLOOR JOIST PER PLAN 1'-8" NOTE HURRICANE THE AT EACH STRUCTURAL MEMBER OR PER LOCAL CODE B CONC. FOOTING W/ 2 #4 REINF RODS CONTINUOUS OR AS PER CODES DBL. 2 x TOP PLATE R-13 INSULATION TYPICAL CRAWL WALL SECTION 1/2" GYPSUM BOARD OR INTERIOR FINISH PER BUILDER'S SPECS SCALE: 3/4" = 1'-0" SEE ELEVATION 2 x STUDS PER SPECS - 1/2" PLYWOOD SHEATHING PLATE TO PLATE OR 1" INSULATION AS CODE REQUIRES 2 x SHOE FINISH FLOOR TO SPECS ANCHOR STRAPS PER LOCAL CODE **WWW** 2 x SHOE 0403 FINISH FLOOR TO SPECS EXTERIOR FINISH PER BUILDERS SPECS GRADE 4" GRAVEL FILL ____ FLOOR JOIST PER PLAN 10" POURED WALL COMPACT FILL . . . ANCHOR STRAPS PER LOCAL CODE 2'-0 GRADE 2 x 6 TREATED SILL CONC. FOOTING W/ 2 #4 REINF. RODS CONTINUOUS OR AS PER CODES TERMITE TREATMENT PER M.P.S. -0-10" POURED WALL - REINFORCED AS CODE REQUIRES 2 x SHOE SEAL AND WATERPROOF BELOW GRADE - 1/2" PARGING AND #6 MIL POLY VAPOR BARRIER FINISH FLOOR TO SPECS ANCHOR STRAPS PER LOCAL CODE 4" CONC. SLAB W/ 6 x 6 10/10 REINF. WIRE MESH 6" GRAVEL ABOVE DRAIN TILE GRADE 4" DRAIN TILE W/ OPEN JOINTS OR PERFORATED TILE (1" PER 20'-0" SLOPE) 0.0 #6 MIL POLY VAPOR BARRIER ----4" GRAVEL FILL 4" STONE BASE IF REQUIRED DUE TO SOIL CONDITIONS OVER COMPACTED FILL COMPACT FILL 1'-8" CONC. FOOTING W/ 2 #4 REINF. RODS CONTINUOUS OR AS PER CODES - MONOLITHIC SLAB FOOTING TYPICAL SLAB WALL SECTION BASEMENT WALL SECTION SCALE: 3/4" = 1'-0" SCALE: 3/4" = 1'-0"



PLAN NO.

TYPICAL SECTIONS

DESIGNER: _____ DRAFTSPERSON: ____ DATE: ________ DATE: _____________ DATE: _____________

QUEET NO

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IMPORTANT NOTE: THESE NOTES AND SPECIFICATIONS ARE PROVIDED BY HOUSE PLAN RESOURCE AS A SERVICE TO THEIR CUSTOMERS TO PROVIDE THE MOST POPULAR CODE TOPICS. THE INFORMATION AND METHODOLOGIES PREPARED HEREIN ARE IN ACCORDANCE TO AND REFERENCED TO THE 2015 INTERNATIONAL RESIDENTIAL CODE® THE INFORMATION IS ALSO A GENERAL SUMMARIZATION OF THE CODE AND IT IS The composition of the compositi CONDITIONS IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR HOMEOWNER TO MAKE THE NECESSARY MODIFICATIONS TO ENSURE CODE COMPLIANCE AND STRUCTURAL INTEGRITY IT IS RECOMMENDED THAT YOU CONSULT & LOCAL ARCHITECT OR ENGINEER OF YOUR CHOICE AND CHECK WITH LOCAL BUILDING OFFICIALS PRIOR TO THE START OF ACTUAL CONSTRUCTION. SPECIAL ENGINEERING MAY REQUIRE THAT THESE A LOOGLANCHIES DIS ECHANGE OF TOOL FUNDE TO COMPLY WITH SCIALS BUILDING OFTHER SPECIAL CONDITIONS AS REQUIRED BUILDING

*(***♦)** <u>**IMPORTANT DISCLAIMER**</u>

INTERVICENT INFORMATION IS INTENDED TO ASSIST AND INFOR THE ENCLOSED INFORMATION IS INTENDED TO ASSIST AND INFOR YOU THROUGH THE CONSTRUCTION OF YOUR HOME. YOUR CONSTRUCTION PLANS HAVE BEEN DRAWN TO PRESCRIBE TO INDUSTRY STANDARDS. THESE PROFESSIONAL STANDARDS DETERMINE HOW CONSTRUCTION PLANS ARE DRAWN AND WHAT INFORMATION THEY INCLUDE. CONSTRUCTION PLANS ARE INTENDED AS A TECHNICAL GUIDE TO PROFESSION CONTRACTORS AND ARE NOT INTENDED TO BE A SET OF STEP-BY-STEP INSTRUCTIONS. THEREFORE, IF YOU ARE PLANNING TO BUILD YOUR HOME WITHOUT THE SERVICED OF A PROFESSIONAL BUILDER WE SUGGEST THAT YOU BECOME THOROUGHLY FAMILIAR WITH READING CONSTRUCTION PLANS OR CONSIDER CONSULTING A CONSTRUCTION SPECIALIST. IF YOU SHOULD HAVE ANY QUESTIONS REGARDING THE CONSTRUCTION PLANS AND/OR THE SUPPORTIVE DOCUMENTATION. PLEASE FEEL FREE TO CONTACT L AT 770-928-0456

GREAT CARE AND EFFORT GOES INTO THE CREATION OF THE DESIGN AND ENGINEERING OF YOUR CONSTRUCTION PLANS HOWEVER, BECAUSE OF THE IMPOSSIBILITY OF PROVIDING ANY PERSONAL AND/OR "ON-SITE" CONSULTATION, SUPERVISION AND CONTROL OVER THE ACTUAL CONSTRUCTION, AND BECAUSE OF THE GREAT VARIANCES IN LOCAL BUILDING CODE REQUIREMENT AND OTHER LOCATION BUILDING AND WEATHER CONDITIONS, HOUSE PLAN RESOURCE NOR THE AGENTS OR EMPLOYEES ASSUMES NO RESPONSIBILITY FOR ANY DAMAGES INCLUDING BU INSTRUCTOR AND CONTRACT AND A CONTRACT ANALINE CONTRACT AND A CONTRACT ANALINE CONTRACT AND A CO THE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ATTENTION OFHQUEE PLAN RESOURCE PRIOR TO COMMENCEMENT OF CONSTRUCTION, PROCEEDING WITH CONSTRUCTION CONSTITUTES MAY DESCREMOUSE ERRORG, AND/ON COMSISIONS ESCOULE THE SOLE RESONSIBILITY OF THE PLICANSER, IF ANY ERRORS ARE DISCOVERED PROFILO CONSTRUCTION HOUSE FLAN BESOURCE WILL BE GIVEN FULL OPPORTUNITY TO CORRECT ANY ERRORS AND/OR OMISSIONS TO THE CONSTRUCTION HOUSE AND ANY OR ALL CIRCUMSTANCES, THE MAXIMUM FINANCIAL LIABLITY TO HOUSE FLAN RESOURCE CAN NOT EXCEED THE TOTAL PLAN PURCHASE.

PROFESSIONAL SEAL

THOUGH EVERY EFFORT WAS MADE TO MAKE THE CONSTRUCTION DOCUMENTS FOLLOW THE I.R.C. NATIONAL CODE METHODOLOGIES A FEW STATES AND CITIES HAVE PASSED BILAWS REGARDING A FEW STATES AND CITIES HAVE PASSED BI-LAWS REGARDING CONSTRUCTION PLANS THAT WOULD BE SUBMITTED TO YOU LOCAL MUNICIPALITY AND USED FOR THE CONSTRUCTION OF YOUR HOME THESE BI-LAWS REQUIRE THE CONSTRUCTION PLANS TO BE THESE BI-LAWS REQUIRE THE CONSTRUCTION PLANS TO BE REVIEWED AND/OR PREPARED, INSPECTED, AND SEALED (OR STAMPED) BY A LICENSED ARCHITECT IN YOUR STATE. IT IS ADVISED THAT YOU CONTACT YOUR MUNICIPALITY'S BUILDING DEPARTMENT FOR INSTRUCTIONS TO COMPLY WITH THEIR CONSTRUCTION PLANS REVIEW PROCESS.

REPRODUCTION OF THESE CONSTRUCTION PLANS, EITHER IN WHOLE OR IN PART, INCLUDING ANY FORM COPYING AND/OR PREPARATION OF A DERIVATIVE WORKS THEREOF. FOR ANY REASON IS STRICTLY PROHIBITED. THE PURCHASE OF A SET OF ISTRUCTION PLANS IN NO WAY TRANSFERS ANY OTHER OWNERSHIP INTEREST IN IT TO THE PURCHASER EXCEPT FOR A LIMITED LICENSING RELEASE TO USE THE SAID PLAN SET FOR CONSTRUCTING ONE AND ONLY ONE DWELLING UNIT. TH PURCHASE OF ADDITIONAL SETS OF THE SAID PLANS AT A REDUCED PRICE FROM THE ORIGINAL SET OR AS PART OF A MULTIPLE SET PACKAGE DOES NOT CONVEY TO THE PURCHASER A LICENCE TO CONSTRUCT MORE THAN ONE DWELLING, SIMILARLY THE PURCHASE OF REPRODUCIBLE CONSTRUCTION PLANS (A.K.A. SEPIAS, MYLARS, OR VELLUMS) CARRIES THE SAME COPYRIGH PROTECTION AS MENTIONED ABOVE. IT IS GENERALLY ALLOW TO MAKE A MAXIMUM OF 10 COPIES FOR THE CONSTRUCTION OF S SINGLE DWELLING ONLY. TO USE ANY PLAN MORE THAN ONCE, AND TO AVOID AND COPYRIGHT/ LICENCE INFIRNGMENT.IT IS NECESSARY TO CONTACT THE ORIGINAL DESIGNER TO RECEIVE AND LICENCE FOR ANY EXTENDED USAGE. WHEREAS A PURCHASEI OF REPRODUCIBLE'S IS GRANTED A LICENCE TO MAKE COPIES. IT SHOULD BE NOTED THAT AS COPYRIGHTED MATERIALS, MAKING PHOTOCOPIES FROM CONSTRUCTION PANS IS ILLEGAL. COPYRIGH AND LICENSEE OF CONSTRUCTION PLANS EXISTS TO PROTECT ALL AND LIEUNSEE OF CONSTITUTION PLANS EXISTS TO PROTECT AN PARTIES. IT REPECTS AND SUPPORTS THE INTELLECTUAL PROPERTY OF THE ORIGINAL ARCHITECT AND/OR DESIGNER, THEREBY KEEPING IT POSSIBLE TO OFFER PRE-DRAWN AFFORDALE PRICES COPYRIGHT LAW FOR PRE-DRAWN CONSTRUCTION PLANS IS NOW BEINS VIGOROUS VENFORCED. COPYRIGHT INFRINGEMENT COULD LEAD TO FINES OF UP TO

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GENERAL SITE NOTES 1. CONTRACTOR TO VERIFY LOCATIONS OF SITE UTILITIES, REQUIREMENTS, AND CONNECTIONS FEES. OWNER. CONTRACTOR AND SUB-CONTACTORS TO PAY ALL OF THIER RELATED CONSTRUCTION PERMIT FEES AS AGREED LIDON RETWEEN THE OWNER AND CONTRACTOR

BEFORE EXCAVATION THE CONTRACTOR SHALL EXAMINE ALL DRAWINGS, MAPS, AND BUILDING SITE OF EXITING FACILITY TO DETERMINE THE ROLITES OF ALL UNDERGROUND UTILITIES

BEFORE DIGGING COMMENCES IT IS ADVISED THAT THE OWNER AND OR CONTRACTOR CALL THEIR STATES UTILITY LOCATOR ACILITATOR. 3. IT IS RECOMMENDED THAT THE SITES SOIL BE TESTED FOR

COMPRESSION RATING TO DETERMINE FOUNDATION AND FOC DESIGN. CONCRETE FOUNDATIONS AND FOOTING DESIGN SHALL BE IN ACCORDANCE TO CHAPTER 4 OF THE I.R.C. CODE. SEE FOUNDATION SECTION ON THIS PAGE FOR MORE DETAIL. CONSULT A LOCAL CIVIL ENGINEER FOR SITE PLANS AND SURVEYS OF EXISTING PROPERTY A LANDSCAPE ARCHITECT SHOULD BE CONSULTED FOR MORE EXTENSIVE LANDSCAP DESIGNS

CHAPTER 3 :: BUILDING PLANNING

SECTION R304 MINIMUM ROOM AREAS

R304.1 MINIMUM AREA. HABITABLE ROOMS SHALL HAVE A FLOOR AREA OF NOT LESS THAN 70 SQUARE FEET (6.5 M2).

EXCEPTION: KITCHENS. R304.2 MINIMUM DIMENSIONS HABITABLE ROOMS SHALL BE NOT LESS THAN 7 FEET (2134 MM) IN ANY HORIZONTAL DIMENSION.

EXCEPTION: KITCHENS

R304.3 HEIGHT EFFECT ON ROOM AREA. PORTIONS OF A ROOM WITH A SLOPING CEILING MEASURING LESS THAN 5 FEET (1524 MM) OR A FURRED CEILING MEASURING LESS THAN 7 FEET (2134 MM) FROM THE FINISHED FLOOR TO THE FINISHED CEILING SHALL NOT BE CONSIDERED AS CONTRIBUTING TO THE MINIMUM REQUIRED HABITABLE AREA FOR THAT ROOM.

SECTION R305 CEILING HEIGHT

R305.1 MINIMUM HEIGHT. HABITABLE SPACE, HALLWAYS AND

PORTIONS OF BASEMENTS CONTAINING THESE SPACES SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET (2134 MM). BATHROOMS, TOILET ROOMS AND LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6 FEET 8 INCHES (2032 MM

NOTE: SEE SECTION R305.1 FOR EXCEPTIONS

R305.1.1 BASEMENTS. PORTIONS OF BASEMENTS THAT DO NOT

CONTAIN HABITABLE SPACE OR HALLWAYS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6 FEET 8 INCHES (2032 MM) EXCEPTION: AT BEAMS, GIRDERS, DUCTS OR OTHER DBSTRUCTIONS, THE CEILING HEIGHT SHALL BE NOT LESS THAN 6 FEET 4 INCHES (1931 MM) FROM THE FINISHED FLOOI

SECTION R306 SANITATION

P306 1 TOIL ET FACILITIES

EVERY DWELLING UNIT SHALL BE PROVIDED WITH A WATER CLOSET, LAVATORY, AND A BATHTUB OR SHOWER.

R306.2 KITCHEN R306.2 KITCHEN. EACH DWELLING UNIT SHALL BE PROVIDED WITH A KITCHEN AREA AND EVERY KITCHEN AREA SHALL BE PROVIDED WITH A SINK.

R306.3 SEWAGE DISPOSAL PLUMBING FIXTURES SHALL BE CONNECTED TO A SANITARY SEWER OR TO AN APPROVED PRIVATE SEWAGE DISPOSAL

R306.4 WATER SUPPLY TO FIXTURES. PLUMBING FIXTURES SHALL BE CONNECTED TO AN APPROVED WATER SUPPLY. KTCHEN SINKS, LAWATORIES, BATHTUBS, SHOWERS, BIOTES, LAUNROY TUBS AND WASHING MACHINE OUTLETS SHALL BE PROVIDED WITH HOT AND COLD WATER.

SECTION R307 TOILET BATH AND SHOWER SPACES

R307.1 SPACE REQUIRED. FIXTURES SHALL BE SPACED IN DANCE WITH FIGURE R307.1, AND IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION P2705.1.

R307.2 BATHTUB AND SHOWER SPACES, BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET (1829 MM) ABOVE

1. THERE SHALL BE A MINIMUM 21" CLEARANCE FROM NOSE OR TIP DF TOILET TO ANY ADJACENT WALL OR FIXTURE.

2. THERE SHALL BE A MINIMUM OF 15" FROM THE CENTER OF TOILET TO ANY ADJACENT WALL OR FIXTURE

3. SHOWER STALLS SHALL BE NO LESS THAN 30"x30" IN SIZE 4 THERE SHALL BE A MINIMUM CLEARANCE IN FRONT OF ANY

ING WITHIN A WATER CLOSE

SECTION R308 GLAZING

R308.4 HAZARDOUS LOCATIONS. THE LOCATIONS SPECIFIED IN SECTIONS R308.4.1 THROUGH R308.4.7 SHALL BE CONSIDERED TO BE SPECIFIC HAZARDOU: LOCATIONS FOR THE PURPOSES OF GLAZING.

R308.4.1 GLAZING IN DOORS.

GLAZING IN DUORS. GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BI-FOLDOORS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

NOTE: SEE SECTION 308.4.1 FOR EXCEPTIONS

GLAZING ADJACENT TO DOORS. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION WHERE THE

BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES 524 mm) ABOVE THE FLOOR OR WALKING SURFACE AND IT MEETS EITHER OF THE FOLLOWING CONDITIONS: WHERE THE GLAZING IS WITHIN 24 INCHES (610 MM) OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A

CLOSED POS WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 SURFACE. THE RAIL SHALL BE CAPABLE OF WITHSTANDING A

ORIZONTAL LOAD OF 50 POLINDS PER LINEAR FOOT (730 N/M HORIZONTAL LOAD OF 50 POUNDS PER LINEAR FOOT (730 MM) WITHOUT CONTACTINS THE CLASS AND HAVE ACROSS-SECTIONAL HEIGHT OF NOT LESS THAN 112 NICHES (38 MM). 3. OUTBOARD PANES IN NISULATING GLASS UNITS AND OTHER MULTIPLE GLAZED PANELS WHERE THE BOTTOM EDGE OF THE GLASS IS 25 FEET (7620mm) OR MORE ABOVE GRADE, A ROOF, WALKING SURFACES OR OTHER HORIZONTAL WITHIN 45 DEGREES (0.79 RAD) OF HORIZONTAL] SURFACE ADJACENT TO THE GLASS

R398.4.3 GLAZING IN WINDOWS. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION IN THE EXPECTED ADDR OF THE INDIVIDUAL PANE IS LARGER THAN THE EXPECTED ADDR OF CLAZING IS LESS THAN 18 EVENTS HAT SMIR MEMORY THE IN OPP

INCHES (457 MM) ABOVE THE FLOOR, 3. THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES (914 MM) ABOVE THE FLOOR; AND 4. ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES

(914 MM), MEASURED HORIZONTALLY NOTE: SEE SECTION R308.4.3. FOR EXCEPTIONS

R308.4.4 GLAZING IN GUARDS AND RAILINGS.

GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS. REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE. SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION R308.4.5 GLAZING AND WET SURFACES. GLAZING IN WALLS. ENCLOSURES OR FENCES CONTAINING OF

FACING HOT TUBS. SPAS. WHIRLPOOLS. SAUNAS. STEAM ROOMS. BATHTURS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED A HAZARDOUS LOCATION. THIS SHALL APPLY TO SINGLE GLAZING AND ALL PANES IN MULTIPLE GLAZING

NOTE: SEE SECTION 308.4.5 FOR EXCEPTION

R308.4.6 GLAZING ADJACENT TO STAIRS AND RAMPS. GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN SINCHES (914 MM) ADAVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STARWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS SHALL BE CONSIDERED TO BE A HAZAROOUS LOCATION.

SEE SECTION 308.4.6 FOR EXCEPTION

R308.4.7 GLAZING ADJACENT TO THE BOTTOM STAIR LANDING GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES (914 MM) ABOVE THE LANDING AND WITHIN A 60-INCH (1524 MM) HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED TO BE A HAZARDOUS

SEE SECTION 308.4.7 FOR EXCEPTION

R308.5 SITE-BUILT WINDOWS. SITE-BUILT WINDOWS SHALL COMPLY WITH SECTION 2404 OF THE INTERNATIONAL BUILDING CODE.

SKYLIGHTS AND SLOPED GLAZING SHALL COMPLY WITH THE FOLLOWING SECTIONS

R308.6 SKYLIGHTS AND SLOPED GLAZING.

R308.6.1 DEFINITIONS. THE FOLLOWING TERMS ARE DEFINED IN CHAPTER 2 -SKYLIGHT, UNIT. -SKYLIGHTS AND SLOPED GLAZING. -TUBULAR DAYLIGHTING DEVICE (TDD).

SECTION R309 GARAGES AND CARPORTS

R309.1 FLOOR SURFACE. GARAGE FLOOR SURFACES SHALL BE OF APPROVED NONCOMBUSTIBLE MATERIAL. THE AREA OF FLOOR LISED FOR PARKING OF ALITOMOBILES OR OTHER VEHICLES SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOOR

R309.2 CARPORTS.

CARPORTS SHALL BE OPEN ON NOT LESS THAN TWO SIDES CARFORT 5 SHALL BE OPEN OR NOT LESS THAN TWO SIDES. CARPORT FLOOR SURFACES SHALL BE OF APPROVED NONCOMBUSTIBLE MATERIAL. CARPORTS NOT OPEN ON TWO OR MORE SIDES SHALL BE CONSIDERED TO BE A GARAGE AND SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION FOR GARAGES

NOTE: SEE SECTION 310 2 3 2 FOR EXCEPTION

R309.4 AUTOMATIC GARAGE DOOR OPENERS. AUTOMATIC GARAGE DOOR OPENERS, IF PROVIDED, SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 325

R309.5 FIRE SPRINKLERS. PRIVATE GARAGES SHALL BE PROTECTED BY FIRE SPRINKLERS WHERE THE GARAGE WALL HAS BEEN DESIGNED BASED ON TABLE R302 1(2) FOOTNOTE & SPRINKI ERS IN GARAGES SHALL BE K302.1(2), FUOINOI E A SPHINKLENS IN GARAGES SHALL BE CONNECTED TO AN AUTOMATIC SPRINKLER SYSTEM THAT COMPLIES WITH SECTION P2904, GRAGE SPRINKLERS SHALL BE RESIDENTIAL SPRINKLERS OR QUICK-RESPONSE SPRINKLERS, DESIGNED TO PROVIDE A DENSITY OF 0.05 GPM/FT2. GARAGE DOORS SHALL NOT BE CONSIDERED OBSTRUCTIONS WITH RESPECT TO SPRINKLER PLACEMENT.

SECTION R310 EMERGENCY ESCAPE AND RESCUE OPENINGS

R310.1 EMERGENCY ESCAPE AND RESCUE OPENING REQUIRED BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE REQUIRED IN EACH SLEEPING ROOM EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN

ENERGENCE ESCAPE AND RESCUE OPENINGS SHALL O DIRECTLY INTO A PUBLIC WAY, OR TO A YARD OR COUR OPENS TO A PUBLIC WAY. EXCEPTION: STORM SHELTERS AND BASEMENTS USED ONLY TO

HOUSE MECHANICAL FOUIPMENT NOT EXCEEDING A TOTAL FLOOR AREA OF 200 SQUARE FEET (18.58 M2) R310.1.1 OPERATIONAL CONSTRAINTS AND OPENING CONTROL

DEVICES. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE

ENERGING ESTIMATION COULD FOR AND RESOLD OF ENERGY WITHOUT THE USE OP FRATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE. WINDOW OPENING CONTROL DEVICES COMPLYING WITH ASTM F 2090 SHALL BE PERMITTED FOR USE ON WINDOWS SERVING AS A REQUIRED EMERGENCY ESCAPE AND RESCUE OPENING

R310.2 EMERGENCY ESCAPE AND RESCUE OPENINGS EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE MINIMUM DIMENSIONS AS SPECIFIED IN THIS SECTION

R310.2.1 MINIMUM OPENING AREA. EMERGENCY AND ESCAPE RESCUE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET (0.530 M2). THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE

OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. THE NET CLEAR HEIGHT OPENING SHALL BE NOT LESS THAN 24 INCHES (610 MM) AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCHES (508 MM

EXCEPTION: GRADE FLOOR OR BELOW GRADE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FEE (0.465 M2).

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R310.5 DWELLING ADDITIONS. WHERE DWELLING ADDITIONS OCCUR THAT CONTAIN SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE

PROVIDED IN EACH NEW SLEEPING ROOM. WHERE DWELLING

ESCAPE AND RESCUE OPENING SHALL BE PROVIDED IN THE NEW

ADDITIONS OCCUR THAT HAVE BASEMENTS. AN EMERGENCY

R310.6 AI TERATIONS OR REPAIRS OF EXISTING BASEMENTS.

WHERE EXISTING BASEMENTS UNDERGO ALTERATIONS OR

R311.1 MEANS OF EGRESS. DWELLINGS SHALL BE PROVIDED WITH A MEANS OF EGRESS IN

ACCORDANCE WITH THIS SECTION. THE MEANS OF EGRESS SHALL

PROVIDE A CONTINUOUS AND UNOBSTRUCTED PATH OFVERTICAL

PROVIDE A CUM INDUDA AND UNDER TRUCTED PAINT OF VENTICAL AND HORIZONTAL EGRESS TRAVEL FROM ALL PORTIONS OF THEDWELLING TO THE REQUIRED EGRESS DOOR WITHOUT REQUIRING TRAVEL THROUGH A GARAGE. THE REQUIRED EGRESS DOOR SHALL OPEN DIRECTLY INTO A PUBLIC WAY OR TO A YARD

NOT LESS THAN ONE EGRESS DOOR SHALL BE PROVIDED FOR EACH DWELLING UNIT. THE EGRESS DOOR SHALL BE SIDE-HING AND SHALL PROVIDE A CLEAR WIDTH OF NOT LESS THAN 32

INCHES (813 MM) WHERE MEASURED BETWEEN THE FACE OF THE

RAD) THE CLEAR HEIGHT OF THE DOOR OPENING SHALL BE NOT

LESS THAN 78 INCHES (1981 MM) IN HEIGHT MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP. OTHER

OPEN-ABLE FROM INSIDE THE DWELLING WITHOUT THE USE OF A

THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH

EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL BE NOT

LESS IHAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A DIMENSION OF NOT LESS THAN 36 INCHES (914 MM) MEASURED IN THE DIRECTION OF TRAVEL THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED 1/4 UNIT

R311.3.1 FLOOR ELEVATIONS AT THE REQUIRED EGRESS DOORS.

R311.3.2 FLOOR ELEVATIONS FOR OTHER EXTERIOR DOORS. DOORS OTHER THAN THE REQUIRED EGRESS DOOR SHALL BE PROVIDED WITH LANDINGS OR FLOORS NOT MORE THAN 73/4

SEE SECTION 311.3.2. FOR EXCEPTION

STORM AND SCREEN DOORS SHALL BE PERMITTED TO SWING

R311.4 VERTICAL EGRESS. EGRESS FROM HABITABLE LEVELS INCLUDING HABITABLE ATTIC

EXTERIOR LANDINGS, DECKS, BALCONIES, STAIRS AND SIMILAR FACILITIES SHALL BE POSITIVELY ANCHORED TO THE PRIMARY STRUCTURE TO RESIST BOTH VERTICAL AND LATERAL FORCES OR

SHALL BE DESIGNED TO BE SELF-SUPPORTING, ATTACHMENT

SHALL NOT BE ACCOMPLISHED BY USE OF TOENAILS OR NAILS

R311.6 HALLWAYS. THE WIDTH OF A HALLWAY SHALL BE NOT LESS THAN 3 FEET (914

AND BASEMENTS NOT PROVIDED WITH AN EGRESS DOOR IN

ACCORDANCE WITH SECTION R311.2 SHALL BE BY A RAMP IN

ACCORDANCE WITH SECTION R311.8 OR A STAIRWAY IN

LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL BE NOT MORE THAN 11/2 INCHES (38 MM) LOWER THAN THE

DOORS SHALL NOT BE REQUIRED TO COMPLY WITH THESE

MINIMUM DIMENSIONS, EGRESS DOORS SHALL BE READILY

R311.3 FLOORS AND LANDINGS AT EXTERIOR DOORS.

VERTICAL IN 12 UNITS HORIZONTAL (2 PERCENT)

NOTE: SEE SECTION 311.3.1 FOR EXCEPTION

INCHES (196 MM) BELOW THE TOP OF THE THRESHOLD.

R311.3.3 STORM AND SCREEN DOORS.

OVER EXTERIOR STAIRS AND LANDINGS

ACCORDANCE WITH SECTION R311.

R311.5 CONSTRUCTION

R311.5.1 ATTACHMENT

SUBJECT TO WITHDRAWAI

NOTE: SEE SECTION 311.3. FOR EXCEPTION

DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES (1.57

AN EMERGENCY ESCAPE AND RESCUE OPENING IS NOT REQUIRED.

NOTE: SEE SECTION 310.5 FOR EXCEPTIONS

NOTE: SEE SECTION 310.6 FOR EXCEPTION

SECTION R311 MEANS OF EGRESS

OR COURT THAT OPENS TO A PUBLIC WAY.

KEY OR SPECIAL KNOWLEDGE OR EEFORT

LESS THAN THE DOOR SERVED

TOP OF THE THRESHOLD.

R311.2 EGRESS DOOR.

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SIGNER:

P310.2.2 WINDOW SILL HEIGHT. K310.22 WINDOW SILL HEIGHT. WHERE A WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES (1118 MM) ABOVE THE FLOOR: WHERE THE SILL HEIGHT IS BELOW GRADE. IT SHALL BE PROVIDED WITH A WINDOW WELL IN ACCORDANCE WITH SECTION R310.2.3.

R310.2.3 WINDOW WELLS. THE HORIZONTAL AREA OF THE WINDOW WELL SHALL BE NOT LESS THAN S SOLARE FEET (0.3 N/2). WITH A HORIZONTAL PROJECTION AND WIDTH OF NOT LESS THAN 36 INCHES (314 MM). THE AREA OF THE WINDOW WELL SHALL ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.

NOTE: SEE SECTION 310.2.3 FOR EXCEPTION

R310.2.3.1 LADDER AND STEPS. WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES (1118 MM) SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS USABLE WITH THE WINDOW IN THE FULLY OPEN POSITION. LADDERS OR STEPS REQUIRED BY THIS SECTION SHALL NOT BE REQUIRED TO COMPLY WITH SECTIONS 311.7 AND R311.8. LADDERS OR RUNGS SHALL HAVE AN INSID WIDTH OF NOT LESS THAN 12 INCHES (305 MM) SHALL PROJECT NOT LESS THAN 3 INCHES (76 MM) FROM THE WALL AND SHALL BI SPACED NOT MORE THAN 18 INCHES (457 MM) ON CENTER VERTICALLY FOR THE FULL HEIGHT OF THE WINDOW WELL

R310.2.3.2 DRAINAGE. WINDOW WELLS SHALL BE DESIGNED FOR PROPER DRAINAGE BY CONNECTING TO THE BUILDING'S FOUNDATION DR REQUIRED BY SECTION R405.1 OR BY AN APPROVED ALTERNATIVE

NOTE: SEE SECTION 310.2.3.2 FOR EXCEPTION

R310.2.4 EMERGENCY ESCAPE AND RESCUE OPENINGS UNDER

R310.24 EMERGENCY ESCAPE AND RESCUE OPENINGS UND DECKS AND PORCHES. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE PROVIDED THAT THE LOCATION OF THE DECK ALLOWS THE EMERGENCY ESCAPE AND RESCUE OPENINGS TO BE FULLY OPENED AND PROVIDES A PATH NOT LESS THAN 36 INCHES (MII) IN HEIGHT TO A VIRD OR COLLET.

R310.2.5 REPLACEMENT WINDOWS. REPLACEMENT WINDOWS INSTALLED IN BUILDINGS MEETING THE SCOPE OF THIS COLOR SHALL BE EXEMPT FROM THE MAXMUM SILL HEIGHT REQUIREMENTS OF SECTIONS R310.1 AND SECTIONS REPT3 THE FILL INCOME CONDITIONS: REPLACEMENT WINDOW

LARGEST STANDARD SIZE WINDOW THAT WILL FIT WITHIN THE EXISTING FRAME OR EXISTING ROUGH OPENING. THE

R310.3 EMERGENCY ESCAPE AND RESCUE DOORS

A BUI KHEAD ENCLOSURE

OPEN POSITIO

OPENING

R310.3.1 MINIMUM DOOR OPENING SIZE.

BE IN ACCORDANCE WITH SECTION R310.2.1

EXISTING HVARIE UK EXISTING ROUGH OPENING. THE REPLACEMENT WINDOW IS OF THE SAME OPERATING STYLE AS THE EXISTING WINDOW OR A STYLE THAT PROVIDES FOR AN EQUAL OR GREATER WINDOW OPENING AREA THAN THE EXISTING WINDOW

WHERE A DOOR IS PROVIDED AS THE REQUIRED EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL BE PERMITTED TO BE A

SIDE-HINGED DOOR OR A SLIDER WHERE THE OPENING IS BELOW

THE MINIMUM NET CLEAR HEIGHT OPENING FOR ANY DOOR THAT

SERVES AS AN EMERGENCY AND ESCAPE RESCUE OPENING SHALL

R310.3.2 BULKHEAD ENCLOSURES. BULKHEAD ENCLOSURES SHALL PROVIDE DIRECT ACCESS FROM THE BASEMENT THE BULKHEAD ENCLOSURE SHALL PROVIDE THE MINIMUM NET CLEAR OPENING EQUAL TO THE DOOR IN THE FULLY

R310.3.2.1 DRAINAGE. BULKHEAD ENCLOSURES SHALL BE DESIGNED FOR PROPER DRAINAGE SY CONNECTING TO THE BULLDING'S FOUNDATION DRAINAGE SYSTEM REQUIRED BY SECTION R405.1 OR BY AN APPROVED ALTERNATIVE METHOD.

R310.4 BARS, GRILLES, COVERS AND SCREENS. BARS, GRILLES, COVERS, SCREENS OR SMILAR DEVICES ARE PERMITTED TO BE PLACED OVER LEMERGISUP: SCREENE AND RESCUE OPENINGS. BULKHEAD ENCLOSURES, OR WINDOW WELLS THAT SERVE SCHO OPENINGS PROVIDED THAT THE HIMMIUM NET CLEAR OPENING SZE COMPLIES WITH SECTIONS R330.11 TO 2020 23 AND EVIC DEVICES ENVIL 18 ERE LEARD FOR

R310.2.3, AND SUCH DEVICES SHALL BE RELEASABLE OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE OR FORCE GREATER THAN THAT REQUIRED

FOR THE NORMAL OPERATION OF THE ESCAPE AND RESCUE

NOTE: SEE SECTION 310.3.2.1 FOR EXCEPTION

THE ADJACENT GROUND ELEVATION. IT SHALL BE PROVIDED WITH

THE REPLACEMENT WINDOW IS NOT PART OF A CHANGE OF

R311.7 STAIRWAYS

R311.7.1 WIDTH

STAIRWAYS SHALL BE NOT LESS THAN 36 INCHES (914 MM) IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED ONE SIDE AND 27 INCHES (698 MM) WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES.

NOTE: SEE SECTION 311.7. FOR EXCEPTION

R311.7.2 HEADROOM. THE HEADROOM IN STARWAYS SHALL BE NOT LESS THAN 6 FEET 8 INCHES (2023 KM) MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINNG THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM ON THAT PORTION OF THE STARWAY.

NOTE: SEE SECTION 311 7 2 FOR EXCEPTIONS

P311 7 3 VERTICAL RISE A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 147 INCHES (3734 MM) BETWEEN FLOOR LEVELS OR LANDING

P311 7 4 WALK J INE

R311.7.4 WALK-LINE. THE WALK-ING-ACROSS WINDER TREADS SHALL BE CONCENTRIC TO THE CURVED DIRECTION OF TRAVEL THROUGH THE TURNAND LOCATED 12 INCHES (305 MM) FROM THE SIDE WHERE THE WINDERS ARE NARROWER. THE 12-INCH (305mm) DIMENSION SHALL BE MEASURED FROM THE WIDEST FONTO FT THE CLEAR STAIR WIDTH AT THE WALKING SURFACE OF THE WINDER. IF WINDERS ARE ADJACENT WITHIN THE FLIGHT, THE POINT OF THE VIDEST CLEAR STAIR WIDTH OF THE ADJACENT WINDERS SHAL BE USED

R311.7.5 STAIR TREADS AND RISERS.

STAIR TREADS AND RISERS SHALL MEET THE REQUIREMENTS OF THIS SECTION. FOR THE PURPOSES OF THIS SECTION. DIMENSIONS AND DIMENSIONED SURFACES SHALL BE EXCLUSIVE OF CARPETS RUGS OR RUNNERS.

R311.7.5.1 RISERS.

ER HEIGHT SHALL BE NOT MORE THAN 73/4 INCHES (196 MM) THE RISER SHALL BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 MM). RISERS SHALL BE VERTICAL OR SLOPED FROM THE UNDERSIDE OF THE NOSING OF THE TREAD ABOVE AT AN ANGLE NOT MORE THAN 30 DEGREES (0.51 RAD) FROM THE VERTICAL. OPEN RISERS ARE PERMITTED PROVIDED THAT THE OPENINGS LOCATED MORE THAN 30 INCHES (762 MM), AS MEASURED VERTICALLY, TO THE FLOOR OR GRADE BELOW DO NOT PERMIT THE PASSAGE OF 4-INCH-DIA (102 MM) SPHERE.

NOTE: SEE SECTION 311.5.1 FOR EXCEPTIONS

R311.7.5.2 TREADS. THE TREAD DEPTH SHALL BE NOT LESS THAN 10 INCHES (254 MM). THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 MM).

R311.7.5.2.1 WINDER TREADS. WINDER TREADS SHALL HAVE A TREAD DEPTH OF NOT LESS THAN 10 INCHES (254MM) MEASURED BETWEEN THE VERTICAL PLANES FOR THE DEPLACE THE VERTICAL PLANES 10 INCHES GAMM) MEASURED BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS SHALL INTERSECTIONS WITH THE WALLAIME. WINDER TREADS SHALL ANY DOINT WITH THE CLEAR WORD FOR THE STAR. WATHIN ANY FUGHT OF STARS. THE LARGEST WINDER TREAD DOINT ANY ANY DOINT WITH THE CLEAR WORD FOT HE STAR. WATHIN ANY FUGHT OF STARS. THE LARGEST WINDER TREAD DO THE STAR. WALLINE SHALL NOT PLACED THE STAR. WATHIN ANY THE WALLAUES SHALL BE ALLOWED WITHIN THE SAME FUGHT OF STARS. AS RECTANGULAR TREADS AND DO NOT HAVE TO DE WITHIN S 3B INC! SM ON OF THE RECTANGULAR TREAD DEFTH.

NOTE: SEE SECTION 311.7.5 .2.1 FOR EXCEPTION

R311.7.5.3 NOSINGS

R311.7.5.3 NOSINGS. THE RADIUS OF CURVATURE AT THE NOSING SHALL BE NOT GREATER THAN 91/6 INCH (14 MM), A NOSING PROJECTION NOT LESS THAN 3/4 INCH (19 MM) AND NOT MORE THAN 11/4 INCHES (32 MM) SHALL BE PROVIDED ON STARWAYS WITH SOLID RISERS. THE MM) SHALL BE PROVIDED ON STARWAYS WITH SOLID RISERS. THE GREATEST NOSING PROJECTION SHALL NOT EXCEED THE SMALLEST NOSING PROJECTION BY MORE THAN 38 INCH (9.5 MM) BETWEEN TWO STORIES, INCLUDING THE NOSING AT THE LEVEN OF FLOORS AND LANDINGS. BEVELING OF NOSINGS SHALL NOT EXCEED 1/2 INCH (12.7 MM)

NOTE: SEE SECTION 311 7 5 3 FOR EXCEPTION

R311.7.5.4 EXTERIOR PLASTIC COMPOSITE STAIR TREADS. PLASTIC COMPOSITE EXTERIOR STAIR TREADS SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION AND SECTION R507.3

R311.7.6 LANDINGS FOR STAIRWAYS

THERE SHALL BE A FLOOR OR LANDING AT THE TOP AND BOTTOM OF EACH STAIRWAY. THE WIDTH PERPENDICULAR TO THE CTION OF TRAVEL SHALL BE NOT LESS THAN THE WIDTH OF THE FLIGHT SERVED. LANDINGS OF SHAPES OTHER THAN SQUARE OR RECTANGULAR SHALL BE PERMITTED PROVIDED THAT THE DEPTH AT THE WALK LINE AND THE TOTAL AREA IS NOT LESS THAN HAT OF A QUARTER CIRCLE WITH A RADIUS EQUAL TO THE REQUIRED LANDING WIDTH WHERE THE STAIRWAY HAS A SHT RUN. THE DEPTH IN THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN 36 INCHES (914 MM)

NOTE: SEE SECTION 311 7.6 FOR EXCEPTION

R311.7.7 STAIRWAY WALKING SURFACE. THE WALKING SURFACE OF TREADS AND LANDINGS OF STAIRWAYS SHALL BE SLOPED NOT STEEPER THAN ONE UNIT VERTICAL IN 48 DIZONTAL /2-DERCENT SLOPE

P311 7 8 HANDPALLS ALLS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR MORE RISERS

R311.7.8.1 HEIGHT. HANDRALI HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE NOT LESS THAN 34 INCHES (864 MM) AND NOT MORE THAN 38 INCHES (665 MM).

NOTE: SEE SECTION 311.7.8.1 FOR EXCEPTIONS

R311.7.8.2 CONTINUITY. HANDRAILS FOR STARWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT, RCM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT TO A MANDRAIL ENDS ANALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OF SAFETY TERMINALS & MUNDRAILS ON AUGUST TO ANALL ABOULT AND TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 11/2 INCHES (38 MM) BETWEEN THE WALLAND THE HANDRALLS

NOTE: SEE SECTION 311.7.8.2 FOR EXCEPTIONS

R311.7.8.3 GRIP-SIZE. REQUIRED HANDRAILS SHALL BE OF ONE OF THE FOLLOWING TYPES OR PROVIDE EQUIVALENT GRASP-ABILITY.

NOTE: SEE R3117.8.3 FOR TYPE I AND TYPE II HANDRAILS. R311.7.8.4 EXTERIOR PLASTIC COMPOSITE HANDRAILS SITE EXTERIOR HANDRAILS SHALL COMPLY WITH

THE REQUIREMENTS OF SECTION R507.3 R311.7.9 ILLUMINATION S SHALL BE PROVIDED WITH ILLUMINATION IN

ACCORDANCE WITH SECTION B303 7 R311.7.10 SPECIAL STAIRWAYS

AVS AND BUILKHEAD ENCLOSURE STAIRWAYS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R311.7 EXCEPT AS SPECIFIED IN SECTIONS R311.7.10.1 AND R311.7.10.2.

P311 7 10 1 SPIRAL STAIRWAYS

R311.7.10.1 SPIRAL STARWAYS. SPIRAL STARWAYS ARE PERMITTED, PROVIDED THAT THE CLEAR WIDTH AT AND BELOW THE HANDRALL IS NOT LESS THAN 28 IN/C BOOM MAY ADD THAUL-LIBE FADILS IN OT CERLETE THAN 23 IN/C BOOM PARK THAU ALL INFORMATION IS NOT CORPORE THAT THAN 23 IN/C HANDRAWS AND THAU AND AND THE WALK-ING. ALL TREADS SHALL BE IDENTICAL, AND THE RISE SHALL BE NOT INCE THAN 9 I/2 IN/CHES (211 MA), HEADROOM SHALL BE NOT LESS THAN 8 FEET 6 IN/CHES (152 MA).

R311.7.10.2 BULKHEAD ENCLOSURE STARWAYS. STARWAYS SERVING BULKHEAD ENCLOSURES, NOT PART OF THE COUTSIE CRADE LEVEL TO THE MEASURES, NOT PART OF THE OUTSIE CRADE LEVEL TO THE MEASUREMT SHALL BE ENLIPT FROM THE REQUIREMENTS OF SECTIONS R311.3 AND R311.7 WHERE THE HEAD THE STARWAY IS NOT MORE THAN S FEET (DASH MANG THE GOAD CLEUE OFENING TO THE MEASURE THE (DASH MANG THE GOAD CLEUE OFENING TO THE MEASURE THE CRASH MART THE GOAD CLEUE OFENING TO THE MEASURE THE CRASH MART THE GOAD CLEUE OFENING TO THE MEASURE STAIRWAY IS COVERED BY A BULKHEAD ENCLOSURE WITH HINGED DOORS OR OTHER APPROVED MEANS.

NOTE: SEE SECTION R311.7.11 THROUGH R311.7.12.2 FOR

R311.8 RAMPS

R311.8.1 MAXIMUM SLOPE. RAMPS SERVING THE EGRESS DOOR REQUIRED BY SECTION R311.2 SHALL HAVE A SLOPE OF NOT MORE THAN 1 UNIT VERTICAL IN 12 UNITS HORIZONTAL (8.3-PERCENT SLOPE). ALL OTHER RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1 UNIT VERTICAL IN 8 UNITS HORIZONTAL (12.5 PERCENT)

EXCEPTION: WHERE IT IS TECHNICALLY INFEASIBLE TO COMPLY ECAUSE OF SITE CONSTRAINTS, RAMPS SHALL HAVE A SLOPE OF NOT MORE THAN 1 UNIT VERTICAL IN 8 UNITS HORIZONTAL (12.5

R311.8.2 LANDINGS REQUIRED. THERE SHALL BE A FLOOR OR LANDING AT THE TOP AND BOTTOM OF EACH RAMP, WHERE DOORS OPEN ONTO RAMPS, AND WHERE RAMPS CHANGE DIRECTIONS. THE WIDTH OF THE LANDING PERPENDICULAR TO THE RAMP SLOPE SHALL BE NOT LESS THAN 36 INCHES (914 MM)

R311.8.3 HANDRAILS REQUIRED. RAILS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF RAMPS EXCEEDING A SLOPE OF ONE UNIT VERTICAL IN 12 UNITS ONTAL (8.33-PERCENT SLOPE)

R311 8 3 1 HEIGHT KATI.63.1 HEIGHT, HANDRAIL HEIGHT, MEASURED ABOVE THE FINISHED SURFACE OF THE RAMP SLOPE, SHALL BE NOT LESS THAN 34 INCHES (864 MMJAND NOT MORE THAN 38 INCHES (965 MM).

R311.8.3.2 GRIP SIZE. HANDRAILS ON RAMPS SHALL COMPLY WITH SECTION R311.7.8.3.

R311.8.3.3 CONTINUITY. R311.8.3.3 CONTINUITY. HANDRALS WHERE REQUIRED ON RAMPS SHALL BE CONTINUOU FOR THE FULL LENGTH OF THE RAMP. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN EWEL FORST OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 11/2 INCHES (38 MM) BETWEEN THE WALL AND THE HANDRAILS.

SECTION R312 GUARDS AND WINDOW FALL PROTECTION

R312.1 GUARDS. GUARDS SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS R312.1.1 THROUGH R312.1.4. R312.11 WHERE REQUIRED. GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, INCLUING STARES, RAMPS AND LANDINGS, THAT ARE LOCATED MORE THAN SO INCHES (728 MM) MEASURED VERTICALLY TO THE FLOCRO ROADE BELLOWAR ANY FOINT WITHIN SINCHES (914 MM) HORIZOHTALY TO THE EDDE OF THE OPEN SIDE. INSECT SOREBWIG STARL NOT BE CONSIDERED AS GUARDS.

R312.1.2 HEIGHT. REQUIRED GUARDS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS, SHALL BE NOT LESS THAN 36 INCHES (914 MM) IN HEIGHT AS MEASURED

VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE LEADING EDGES OF THE TREADS.

NOTE: SEE SECTION 312.1.2. FOR EXCEPTIONS R312.1.3 OPENING LIMITATIONS

PERMIT OCCUR, OR WHERE ONE OR MORE SLEEPING ROOMS ARE GUARDS SHALL NOT HAVE OPENINGS FROM THE ADDED OR CREATED IN EXISTING DWELLINGS. THE INDIVIDUAL WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT DWELLING UNIT SHALL BE EQUIPPED WITH SMOKE ALARMS ALLOW PASSAGE OF A SPHERE 4 INCHES (102 mm) IN DIAMETER. LOCATED AS REQUIRED FOR NEW DWELLINGS

SECTION R313

SYSTEMS.

OR NEPA 13D

P314 1 GENERAL

R314.1.1 LISTINGS.

SECTION

R314.3 LOCATION

LOCATIONS:

R314.2 WHERE REQUIRED.

R314.2.1 NEW CONSTRUCTION.

INSTALLED IN TOWNHOUSES.

NOTE: SEE SECTION 313.1 FOR EXCEPTION

R313.1.1 DESIGN AND INSTALLATION.

AUTOMATIC FIRE SPRINKLER SYSTEMS

313.1 TOWNHOUSE AUTOMATIC FIRE SPRINKLER SYSTEMS

AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS FOR TOWNHOUSES SHALL BE DESIGNED AND INSTALLED IN

R313.2 ONE- AND TWO-FAMILY DWELLINGS AUTOMATIC FIRI

AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE

AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS SHALL BE

DESIGNED AND INSTALLED IN ACCORDANCE WITH SECTION P2904

SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND SECTION R314.

SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217

LISTED IN ACCORDANCE WITH UL 217 AND UL 2034.

COMBINATION SMOKE AND CARBON MONOXIDE ALARMS SHALL BE

SMOKE ALARMS SHALL BE PROVIDED IN ACCORDANCE WITH THIS

SMOKE ALARMS SHALL BE PROVIDED IN DWELLING UNITS.

WHERE ALTERATIONS REPAIRS OR ADDITIONS REQUIRING A

R314.2.2 ALTERATIONS, REPAIRS AND ADDITIONS.

NOTE: SEE SECTION 314.2.2 FOR EXCEPTIONS

IN EACH SLEEPING ROOM

STORY BELOW THE UPPER LEVEL.

SECTION R314.3.

SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING

OUTSIDE EACH SEPARATE SLEEPING AREA IN THE

IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING

BASEMENTS AND HABITABLE ATTICS AND NOT INCLUDING CRAWL

SPACES AND LININHABITABLE ATTICS. IN DWELLINGS OR DWELLING

BETWEEN THE ADJACENT LEVELS A SMOKE ALARM INSTALLED ON

LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL

BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS

WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY

SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3 FEET

UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR

THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER

(914 MM) HORIZONTALLY FROM THE DOOR OR OPENING OF A

ACCORDANCE WITH SECTION P2904 OR NEPA 13D

INSTALLED IN ONE, AND TWO-EAMILY DWELLINGS

NOTE: SEE SECTION 313.2 FOR EXCEPTION

SECTION R314 SMOKE ALARMS

R313.2.1 DESIGN AND INSTALLATION

AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE

NOTE: SEE SECTION 312.1.3. FOR EXCEPTIONS

P312 1 4 EXTERIOR PLASTIC COMPOSITE GUARDS PLASTIC COMPOSITE EXTERIOR GUARDS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R317.4.

R312.2 WINDOW FALL PROTECTION WINDOW FALL PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS R312.2.1 AND R312.2.2.

R312 2 1 WINDOW SILLS

ID DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLE WINDOW OPENING IS LOCATED LESS THAN 24 INCHES (610 MM) ABOVE THE FINISHED FLOOR AND GREATER THAN 72 INCHES (1829 MM) ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING, THE OPERABLE WINDOW SHALL COMPLY WITH ONE OF THE

OPERABLE WINDOWS WITH OPENINGS THAT WILL NOT ALLOW A 4-INCH-DIAMETER (102 MM) SPHERE TO PASS THROUGH THE OPENING WHERE THE OPENING IS IN ITS LARGEST OPENED POSITION.

OPERABLE WINDOWS THAT ARE PROVIDED WITH WINDOW FALL PREVENTION DEVICES THAT COMPLY WITH ASTM F 2090. RMATING COMPLAY WITH WINDOW OPENING CONTROL DEVICES THAT COMPLY WITH SECTION B31222

OPENING AREA OF THE WINDOW LINIT TO LESS THAN THE AREA

R312.2.2 WINDOW OPENING CONTROL DEVICES. WINDOW OPENING CONTROL DEVICES SHALL COMPLY WITH ASTM F 2090. THE WINDOW OPENING CONTROL DEVICE. AFTER OPERATION TO RELEASE THE CONTROL DEVICE ALLOWING THE WINDOW TO FULLY OPEN. SHALL NOT REDUCE THE NET CLEAF

QUIRED BY SECTION R310.2.1

R314.3.1 INSTALLATION NEAR COOKING APPLIANCES. SMOKE ALARMS SHALL NOT BE INSTALLED IN THE FOLLOWING LOCATIONS UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM IN A LOCATION REQUIRED BY SECTION R314.3

IONIZATION SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 20 FEET (6096 MM) HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. 2 IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING

SWITCH SHALL NOT BE INSTALLED LESS THAN 10 FEET (3048 mm) HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.

PHOTOELECTRIC SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 6 FEET (1828 MM) HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE

R314.4 INTERCONNECTION. WHERE MORE THAN ONE SMOKE ALARM

IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT IN ACCORDANCE WITH SECTION R314.3. THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL DWELLING UNIT. PHYSICAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM

NOTE: SEE SECTION 314.4 FOR EXCEPTION

R314.5 COMBINATION ALARMS. COMBINATION SMOKE AND CARBON MONOXIDE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF SMOKE ALARMS. R314.6 POWER SOURCE.

MOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND, WHERE PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION. NOTE: SEE SECTION 314.6 FOR EXCEPTIONS

R314.7 FIRE ALARM SYSTEMS FIRE ALARM SYSTEMS SHALL BE PERMITTED TO BE USED IN LIEU OF SMOKE ALARMS AND SHALL COMPLY WITH SECTIONS R314.7.1 THROUGH R314 7 4

SECTION R315 CARBON MONOXIDE ALARMS

R315.1 GENERAL CARBON MONOXIDE ALARMS SHALL COMPLY WITH SECTION R315 R315.1.1 LISTINGS.

CARBON MONOXIDE ALARMS SHALL BE LISTED IN ACCORDANCE VITH UL 2034. COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 2034 AND UL

R315.2 WHERE REQUIRED. CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS R315.2.1 AND R315.2.2.

R315.2.1 NEW CONSTRUCTION. FOR NEW CONSTRUCTION, CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN DWELLING UNITS WHERE EITHER OR BOTH OF THE FOLLOWING CONDITIONS EXIST.

THE DWELLING UNIT CONTAINS A FUEL-FIRED APPLIANCE THE DWELLING UNIT HAS AN ATTACHED GARAGE WITH AN OPENING THAT COMMUNICATES WITH THE DWELLING UNIT

P315 2 2 ALTERATIONS REPAIRS AND ADDITIONS

WHERE ALTERATIONS, REPAIRS AND ADDITIONS. WHERE ALTERATIONS, REPAIRS OR ADDITIONS REQUIRING A PERMIT OCCUR, OR WHERE ONE OR MORE SLEEPING ROOMS ARE ADDED OR CREATED IN EXISTING DWELLINGS. THE INDIVIDUA DWELLING UNIT SHALL BE EQUIPPED WITH CARBON MONOXIDE ALARMS LOCATED AS REQUIRED FOR NEW DWELLINGS EXCEPTIONS:

NOTE: SEE SECTION 315.2.2. FOR EXCEPTIONS

R315.3 LOCATION. CARBON MONOVIDE ALARMS IN DWELLING UNITS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, WHERE A FUEL-BURNING APPLIANCE IS LOCATED WITHIN A BEDROOM OR ITS ATTACHED BATHROOM, A CARBON MONOXIDE ALARM SHALL BE INSTALLED WITHIN THE BEDROOM

R315.4 COMBINATION ALARMS

COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF CARBON MONOXIDE ALARMS.

R315.5 POWER SOURCE

CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND, WHERE PRIMARY POWER IS INTERRUPTED. SHALL RECEIVE POWER FROM A BATTERY. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVER-CURRENT PROTECTION

NOTE: SEE SECTION 315.5 FOR EXCEPTIONS

R315.6 CARBON MONOXIDE DETECTION SYSTEMS.

CARBON MONOXIDE DETECTION SYSTEMS SHALL BE PERMITTED TO BE USED IN LIEU OF CARBON MONOXIDE ALARMS AND SHALL COMPLY WITH SECTIONS R315.6.1 THROUGH R315.6.4.

SECTION R321 ELEVATORS AND PLATFORM LIFTS

R321.1 ELEVATORS. WHERE PROVIDED, PASSENGER ELEVATORS, LIMITED- USE AND LIMITED-APULCATION ELEVATORS OR PRIVATE RESIDENCE ELEVATORS SHALL COMPLY WITH ASME A17.1/CSA B44.

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SECTION R322 FLOOD-RESISTANT CONSTRUCTION

P322 1 GENERAL BUILDINGS AND STRUCTURES CONSTRUCTED IN WHOLE OR IN PART IN FLOOD HAZARD AREAS. INCLUDING A OR V ZONES AND COASTAL & ZONES, AS ESTABLISHED IN TABLE R301.2(1), AND SUBSTANTIAL IMPROVEMENT AND RESTORATION OF SUBSTANTIAL DAMAGE OF BUILDINGS AND STRUCTURES IN FLOOD HAZARD AREAS. SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS CONTAINED IN THIS

SECTION. BUILDINGS AND STRUCTURES THAT ARE LOCATED IN MORE THAN ONE FLOOD HAZARD AREA SHALL COMPLY WITH THE PROVISIONS ASSOCIATED WITH THE MOST RESTRICTIVE FLOOD HAZARD AREA. BUILDINGS AND STRUCTURES LOCATED IN WHOLE OR IN PART IN IDENTIFIED ELOODWAYS SHALL BE DESIGNED. AND CONSTRUCTED IN ACCORDANCE WITH ASCE 24

P322.1.2 STRUCTURAL SYSTEMS

SHALL BE THE HIGHER OF THE FOLLOWING

FOUALED OR EXCEEDED IN ANY GIVEN YEAR: OR

REFER TO SECTIONS P322 1 4 1 AND P322 1 4 2

R322 1 5 LOWEST FLOOR

ELECTRICAL SYSTEMS

SECTION

E COMMUNITY, OR OTHERWISE LEGALLY DESIGN

STRUCTURAL SYSTEMS OF BUILDINGS AND STRUCTURES SHALL BE DESIGNED. CONNECTED AND ANCHORED TO RESIST FLOTATION, COLLAPSE OR PERMANENT LATERAL MOVEMENT DUE TO STRUCTURAL LOADS AND STRESSES FROM FLOODING EQUAL TO THE DESIGN FLOOD FLEVATION

R322.1.3 FLOOD-RESISTANT CONSTRUCTION BUILDINGS AND STRUCTURES ERECTED IN AREAS PRONE TO FLOODING SHALL BE CONSTRUCTED BY METHODS AND PRACTICES THAT MINIMIZE FLOOD DAMAGE. R322.1.4 ESTABLISHING THE DESIGN FLOOD ELEVATION.

THE DESIGN FLOOD ELEVATION SHALL BE USED TO DEFINE FLOOD

HAZARD AREAS. AT A MINIMUM, THE DESIGN FLOOD ELEVATION

THE BASE FLOOD ELEVATION AT THE DEPTH OF PEAK

PERCENT (100-YEAR FLOOD) OR GREATER CHANCE OF BEING

THE AREA DESIGNATED ON A FLOOD HAZARD MAP ADOPTED BY

FOR DETERMINING DESIGN FLOOD ELEVATIONS AND IMPACTS

THE LOWEST FLOOR SHALL BE THE LOWEST FLOOR OF THE

R322.1.6 PROTECTION OF MECHANICAL, PLUMBING AND

LOWEST ENCLOSED AREA. INCLUDING BASEMENT AND EXCLUDING

ANY UNFINISHED FLOOD-RESISTANT ENCLOSURE THAT IS USEABLE SOLELY FOR VEHICLE PARKING, BUILDING ACCESS OR LIMITED

STORAGE PROVIDED THAT SUCH ENCLOSURE IS NOT BUILT SO AS

TO RENDER THE BUILDING OR STRUCTURE IN VIOLATION OF THIS

ELECTRICAL SYSTEMS, EQUIPMENT AND COMPONENTS; HEATING,

VENTILATING, AIR CONDITIONING; PLUMBING APPLIANCES AND

EQUIPMENT SHALL BE LOCATED AT OR ABOVE THE ELEVATION

PART OF A SUBSTANTIAL IMPROVEMENT, ELECTRICAL SYSTEMS,

FOUIPMENT AND COMPONENTS: HEATING VENTILATING AIR

CONDITIONING AND PLUMBING APPLIANCES AND PLUMBING FIXTURES; DUCT SYSTEMS; AND OTHER SERVICE EQUIPMENT

SHALL MEET THE REQUIREMENTS OF THIS SECTION, SYSTEMS

FIXTURES, AND EQUIPMENT AND COMPONENTS SHALL NOT BE

MOUNTED ON OR PENETRATE THROUGH WALLS INTENDED TO

R322.1.7 PROTECTION OF WATER SUPPLY AND SANITARY SEWAGE

SHALL BE DESIGNED TO MINIMIZE OR ELIMINATE INFILTRATION OF

FLOOD WATERS INTO THE SYSTEMS IN ACCORDANCE WITH THE

PLUMBING PROVISIONS OF THIS CODE, NEW AND REPLACEMENT

ELIMINATE INFILTRATION OF FLOODWATERS INTO SYSTEMS AND

ACCORDANCE WITH THE PLUMBING PROVISIONS OF THIS CODE

AND CHAPTER 3 OF THE INTERNATIONAL PRIVATE SEWAGE

SANITARY SEWAGE SYSTEMS SHALL BE DESIGNED TO MINIMIZE OR

BREAK AWAY UNDER FLOOD LOADS

DISPOSAL CODE

NOTE: SEE SECTION 322-1.6. FOR EXCEPTION

NEW AND REPLACEMENT WATER SUPPLY SYSTEMS

DISCHARGES FROM SYSTEMS INTO EL CODIWATERS IN

PLUMBING FIXTURES: DUCT SYSTEMS: AND OTHER SERVICE

REQUIRED IN SECTION R322.2 OR R322.3. IF REPLACED AS

ELEVATION OF FLOODING, INCLUDING WAVE HEIGHT, THAT HAS A 1

THE ELEVATION OF THE DESIGN FLOOD ASSOCIATED WITH

R322.1.8 FLOOD-RESISTANT MATERIALS. BUILDING MATERIALS AND INSTALLATION METHODS USED FOR

FLOORING AND INTERIOR AND EXTERIOR WALLS AND WALL COVERINGS BELOW THE ELEVATION REQUIRED IN SECTION R322.2 OR R322 3 SHALL BE FLOOD DAMAGE- RESISTANT MATERIALS THAT CONFORM TO THE PROVISIONS OF FEMA TB-2

SEE SECTION R322.2 FOR FLOOD HAZARD AREAS (INCLUDING A

P322.2.2 ENCLOSED AREA BELOW DESIGN ELOOD ELEVATION

ENCLOSED AREAS, INCLUDING CRAWL SPACES, THAT ARE BELOW THE DESIGN FLOOD ELEVATION SHALL: BE USED SOLELY FOR PARKING OF VEHICLES, BUILDING ACCESS OR S

BE PROVIDED WITH FLOOD OPENINGS THAT MEET THE IC CRITERIA AND ARE INSTALLED IN ACCO SECTION R322.2.2.1 SECTIONS 2.1 THROUGH 2.3,

-R322.2.2.1 FOR INSTALLATION OF OPENINGS. -R322.2.3 FOUNDATION DESIGN AND CONSTRUCTION -R322.2.4 TANKS.

REFER TO SECTION R322.3 FOR COASTAL HIGH-HAZARD AREAS (INCLUDING V ZONES AND COASTAL A ZONES, WHERE DESIGNATED). INCLUDING:

R322.3.1 LOCATION AND SITE PREPARATION

R322.3.2 ELEVATION REQUIREMENTS R322.3.3 FOUNDATIONS R322.3.4 WALLS BELOW DESIGN FLOOD ELEVATION R322.3.5 ENCLOSED AREAS BELOW DESIGN FLOOD ELEVATION. ENCLOSED AREAS BELOW THE DESIGN FLOOD ELEVATION SHALI

BEUSED SOLELY FOR PARKING OF VEHICLES. BUILDING ACCESS OR STORAGE

R322.1.8 FLOOD-RESISTANT MATERIALS BUILDING MATERIALS AND INSTALLATION METHODS USED FOR FLOORING AND INTERIOR AND EXTERIOR WALLS AND WALL COVERINGS BELOW THE ELEVATION REQUIRED IN SECTION R322.2 OR R322 3 SHALL BE FLOOD DAMAGE- RESISTANT MATERIALS THAT CONFORM TO THE PROVISIONS OF FEMA TB-2.

SEE SECTION P322.2 FOR FLOOD HAZARD AREAS (INCLUDING A ZONES)

R322.2.2 ENCLOSED AREA BELOW DESIGN FLOOD ELEVATION ENCLOSED AREAS, INCLUDING CRAWL SPACES, THAT ARE BELOW THE DESIGN FLOOD ELEVATION SHALL: 1. BE USED SOLELY FOR PARKING OF VEHICLES, BUILDING

ACCESS OR STORAGE. 2. BE PROVIDED WITH FLOOD OPENINGS THAT MEET THE DE PROVIDED WITH FLOOD OPENINGS THAT MEET THE FOLLOWING CRITERIA AND ARE INSTALLED IN ACCORDANCE WITH SECTION R322.2.2.1 SECTIONS 2.1 THROUGH 2.3, AS WELL AS, SECTIONS:

-R322.2.2.1 FOR INSTALLATION OF OPENINGS. -R322.2.3 FOUNDATION DESIGN AND CONSTRUCTION -R322.2.4 TANKS.

REFER TO SECTION R322.3 FOR COASTAL HIGH-HAZARD AREAS (INCLUDING V ZONES AND COASTAL A ZONES, WHERE DESIGNATED). INCLUDING:

R322.3.1 LOCATION AND SITE PREPARATION R322.3.2 ELEVATION REQUIREMENTS R322.3.3 FOUNDATIONS R322.3.4 WALLS BELOW DESIGN FLOOD ELEVATION R322.3.5 ENCLOSED AREAS BELOW DESIGN FLOOD ELEVATION ENCLOSED AREAS BELOW THE DESIGN FLOOD ELEVATION SHALL BEUSED SOLELY FOR PARKING OF VEHICLES, BUILDING ACCESS

OR STORAGE R322.1.8 FLOOD-RESISTANT MATERIALS. BUILDING MATERIALS AND INSTALLATION METHODS USED FOR FLOORING AND INTERIOR AND EXTERIOR WALLS AND WALL COVERINGS BELOW THE ELEVATION REQUIRED IN SECTION R322.2 OR R322.3 SHALL BE FLOOD DAMAGE- RESISTANT MATERIALS THAT

CONFORM TO THE PROVISIONS OF FEMA TB-2.

SEE SECTION R322.2 FOR FLOOD HAZARD AREAS (INCLUDING A ZONES)

R322.2.2 ENCLOSED AREA BELOW DESIGN FLOOD ELEVATION D ARFAS. INCLUDING CRAWL SPACES, THAT ARE BELOW THE DESIGN FLOOD FLEVATION SHALL

BE USED SOLELY FOR PARKING OF VEHICLES. BUILDING ACCESS OR STORAGE BE PROVIDED WITH ELCOD OPENINGS THAT MEET THE

SECTION R322.2.2.1 SECTIONS 2.1 THROUGH 2.3, AS WELL AS, SECTIONS

-R322.2.1 FOR INSTALLATION OF OPENINGS. -R322.2.3 FOUNDATION DESIGN AND CONSTRUCTION -R322.2.4 TANKS.

REFER TO SECTION R322.3 FOR COASTAL HIGH-HAZARD AREAS (INCLUDING V ZONES AND COASTAL & ZONES, WHERE DESIGNATED), INCLUDING

R322.3.1 LOCATION AND SITE PREPARATIO R322.3.2 ELEVATION REQUIREMENTS R322.3.3 FOUNDATIONS

R322.3.4 WALLS BELOW DESIGN FLOOD ELEVATION R322.3.5 ENCLOSED AREAS BELOW DESIGN FLOOD ELEVATION. ENCLOSED AREAS BELOW THE DESIGN FLOOD ELEVATION SHALL BEUSED SOLELY FOR PARKING OF VEHICLES. BUILDING ACCESS OR STORAGE

SECTION R323 STORM SHELTERS R323.1 GENERAL.

THIS SECTION APPLIES TO STOPM SHELTERS WHERE THIS SECTION APPLIES TO STORM SHELTERS WHERE CONSTRUCTED AS SEPARATE DETACHED BUILDINGS OR WHERE CONSTRUCTED AS SAFE ROOMS WITHIN BUILDINGS FOR THE PURPOSE OF PROVIDING REFUGE FROM STORMS THAT PRODUCE HIGH WINDS, SUCH AS TORNADOS AND HURRICANES. IN ADDITION TO OTHER APPLICABLE REQUIREMENTS IN THIS CODE, STORM SHELTERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ICC/NSSA-500.

SECTION R326 SWIMMING POOLS, SPAS AND HOT TUBS R326.1 GENERAL

 $\langle \phi \rangle$ THE DESIGN AND CONSTRUCTION OF POOLS AND SPAS SHALL COMPLY

CHAPTER 4 :: FOUNDATIONS

SECTION R401 GENERAL

R401.2 REQUIREMENTS. FOUNDATION CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IN ACCORDANCE WITH SECTION R301 AND OF TRANSMITTING THE RESULTING LOADS TO THE SUPPORTING SOIL FILL SOILS THAT SUPPORT FOOTINGS AND SUPPORTING SUIL-ITLL SUILS THAT SUPPORT FOOTINGS AND FOUNDATIONS SHALL BE DESIGNED, INSTALLED AND TESTED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. GRAVE FILL USED AS FOOTINGS FOR WOOD AND PRECAST CONCRETE FOUNDATIONS SHALL COMPLY WITH SECTION R403.

R401.3 DRAINAGE.

SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECTION THAT DOES NOT CREATE A HAZARD. LOTS SHALL BE GRADED TO DRAIN SUPEACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHALL FALLA MINIMUM OF 6 INCHES (152 MM) WITHIN THE FIRST 10 EFET (3048 MM)

NOTE: SEE SECTION 312.1.3 FOR EXCEPTIONS

R401.4 SOIL TESTS. WHERE QUANTIFIABLE DATA CREATED BY ACCEPTED SOIL

SCIENCE METHODOLOGIES INDICATE EXPANSIVE COMPRESSIBLE SHIFTING OR OTHER QUESTIONABLE SOIL CHARACTERISTICS ARE LIKELY TO BE PRESENT THE BUILDING OFFICIAL SHALL DETERMINE VHETHER TO REQUIRE A SOIL TEST TO DETERMINE THE SOIL'S HARACTERISTICS AT A PARTICULAR LOCATION. THIS TEST SHA E DONE BY AN APPROVED AGENCY USING AN APPROVED

SECTION R402 MATERIALS

R402.1 WOOD FOUNDATIONS. WOOD FOUNDATION SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE. R402.1.1 FASTENERS. FASTENERS USED BELOW GRADE TO ATTACH PLYWOOD TO THE EXTERIOR SIDE OF EXTERIOR ATTACH PLYWOO TO TAWLSPACE WALLS TURIOR SIDE OF EXTERIOR BASEMENT OR CAWLSPACE WALLS TURIS, OR FASTIMER'S USED IN KIELE WALL CONSTRUCTION, SHALL BE OF TYPE 340 CR 32 STATLESS STELE. FASTIMER'S USED ABOVE GRADE TO ATTACH PLYWOOD AND ALL LIMERE. TOLIMBRE. TOLIMBRE. TOLIMBRE. THOSE USED AND ALL LIMERE. TOLIMBRE. TOLIMBRE. TOLIMBRE. 304 OR 316 STAINLESS STEEL, SILICON BRONZE, COPPER. HOT-DIPPED GALVANIZED (ZINC COATED) STEEL NAILS, OR HOT-TUMBLED GALVANIZED (ZINC COATED) STEEL NAILS. ELECTRO-GALVANIZED STEEL NAILS AND GALVANIZED (ZINC COATED) STEEL STAPLES SHALL NOT BE PERMITTED

R402 1 2 WOOD TREATMENT

ALL LUMBER AND PLYWOOD SHALL BE PRESSURE-PRESERVATIVE TREATED AND DRIED AFTER TREATMENT IN ACCORDANCE WITH AWPA U1 (COMMODITY SPECIFICATION A. USE CATEGORY 4B AND SECTION 5.2). AND SHALL BEAR THE LABEL OF AN ACCREDITED AGENCY. WHERE LUMBER AND/OR PLYWOOD IS CUT OR DRILLED AFTER REATMENT. THE TREATED SURFACE SHALL BE FIELD TREATED WITH COPPER NAPHTHENATE. THE CONCENTRATION OF WHICH SHALL CONTAIN A MINIMUM OF 2-PERCENTCOPPER METAL, BY REPEATED BRUSHING, UIPPING OR SOAKING UNTIL THE WOOD ABSORBS NO MORE PRESERVATIVE.

R402.2 CONCRETE

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF E CSC AS SHOWN IN TABLE R402.2 CONCRETE SIREMS IN OF FLSLA, AS SHOWN IN INALE RADZ2 CONCRETE SUBJECT TO MODERATE OR SEVERE WEATHERING AS INDICATED IN TABLE R3012(1) SHALL BE AR ENTRAINED AS SPECIFIED IN TABLE R402.2. THE MAXIMUM WEIGHT OF FLY ASH, OTHER POZZOLANS, SILCA FUME, SLAG OR BLENDED CEMENTS THAT IS INCLUDED IN CONCRETE MIXTURES FOR GARAGE FLOOR SLABS AND FOR EXTERIOR PORCHES, CARPORT SI ARS AND STEPS THAT WILL BE EXPOSED TO DEICING CHEMICALS SHALL NOT EXCEED HE PERCENTAGES OF THE TOTAL WEIGHT OF CEMEN MATERIALS SPECIFIED IN SECTION 19.3.3.4 OF ACI MATERIALS USED TO PRODUCE CONCRETE AND TESTING THEREOF SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN CHAPTERS 19 AND 20 OF ACI 318 OR ACI 332, R402.2.1

SECTION 403 FOOTINGS

R403.1 GENERA ALL EXTERIOR WALLS SHALL BE SUPPORTED ON CONTINUOUS SOLID OR FULLY GROUTED MASONRY OR CONCRETE FOOTINGS CRUSHED STONE FOOTINGS, WOOD FOUNDATIONS, OR OTHER APPROVED STRUCTURAL SYSTEMS WHICH SHALL BE OF SUFFICIENT DESIGN TO ACCOMMODATE ALL LOADS ACCORDING SOFFICIENT DESIGN TO ACCOMMODATE ALL COMDS ACCORDING TO SECTION ROIT AND TO TRANSMIT THE RESULTING COADS TO THE SOL WITHIN THE LIMITATIONS AS DETERMINED FROM THE CHARACETER OF THE SOLF FOOTINGS SHALL BE SUPPORTED ON UNDISTURBED NATURAL SOLS OR ENGINEERED FILL CONCRETE FOOTINGS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R403 OR IN ACCORDANCE WITH ACI 332

R403.1.1 MINIMUM SIZE. THE MINIMUM WIDTH, W, AND THICKNESS, T, FOR CONCRETE FOOTINGS SHALL BE IN ACCORDANCE WITH TABLES R403.1(1) THROUGH R403.1(3) AND FIGURE R403.1(1) OR R403.1.3. AS APPLICABLE THE FOOTING WIDTH SHALL BE BASED ON THE APPLICABLE. THE FOOTING WIDTH SHALL BE BASED ON THE LOAD-BEARING VALUE OF THE SOLUTIA ACCORDANCE WITH TABLE ROI-4.1. FOOTING PROJECTIONS, P, SHALL BE NOT LESS THAN 2 INCHES (51 MM) AND SHALL NOT EXCEED THE THICKNESS OF THE FOOTING FOOTING THREAD AND PROFERENCE OF THE FOOTING. FOOTING THICKNESS AND PROJECTION FOR FIREPLACES SHALL BE IN ACCORDANCE WITH SECTION R1001.2. THE SIZE OF FOOTINGS SUPPORTING PIERS AND COLUMNS SHALL BE BASED ON THE TRIBUTARY LOAD AND ALLOWABLE SOIL RESSURE IN ACCORDANCE WITH TABLE R401.4.1. FOOTINGS FOR PRESSURE IN ACCORDANCE WITH TABLE R4014.1. FOOTINGS FC WOOD FOUNDATIONS SHALL BE IN ACCORDANCE WITH THE DETAILS SET FORTH IN SECTION R403.2, AND FIGURES R403.1(2) AND R403.1(3).

REFER TO THESE SECTIONS FOR THE FOLLOWING TOPICS: R403.1.2 CONTINUOUS FOOTING IN SEISMIC DESIGN CATEGORIES PAGE 1.2 CONTINUE DO DO DA AND D2. PAGE 1.3 FOOTING AND STEM WALL REINFORCING IN SEISMIC PAGESTAS FOOTING AND STEM WALL REINFORCING IN SEISMI DESIGN CATEGORIES D0, D1, AND D2. PAGESTAS IN SEISMIC BEARING AND BRACED WALL PANEL FOOTINGS IN SEISMIC DESIGN CATEGORIES D0, D1 AND D2. -R403 1 3 5 REINFORCEMENT

R403 1 4 MINIMUM DEPTH EXTERIOR FOOTINGS SHALL BE PLACED NOT LESS THAN 12 INCHES

(305 MM) BELOW THE UNDISTURBED GROUND SURFACE. WHERE APPLICABLE. THE DEPTH OF FOOTINGS SHALL ALSO CONFORM TO SECTIONS R403 1.4.1 THROUGH R403142

P403 1 4 1 EPOST PROTECTION EXCEPT WHERE OTHERWISE PROTECTED FROM FROST

FOUNDATION WALLS, PIERS AND OTHER PERMANENT SUPPORTS OF BUILDINGS AND STRUCTURES SHALL BE PROTECTED FROM FROST BY ONE OR MORE OF THE FOLLOWING METHODS LISTED IN THE IRC CODE R403.1.5 SLOPE THE TOP SURFACE OF FOOTINGS SHALL BE LEVEL. THE BOTTOM SURFACE OF FOOTINGS SHALL NOT HAVE A SLOPE EXCEEDING ONE UNIT VERTICAL IN 10 UNITS HORIZONTAL (10-PERCENT SLOPE) FOOTINGS SHALL BE STEPPED WHERE IT IS NECESSARY TO CHANGE THE ELEVATION OF THE TOP SURFACE OF THE FOOTINGS OR WHERE THE SLOPE OF THE BOTTOM SURFACE OF THE FOOTINGS WILL EXCEED ONE UNIT VERTICAL IN 10 UNITS HORIZONTAL (10-PERCENT SLOPE).

R403 1.6 FOUNDATION ANCHORAGE. WOOD SILL PLATES AND WOOD WALLS SUPPORTED DIRECTLY ON CONTINUOUS FOUNDATIONS SHALL BE ANCHORED TO THE

OUNDATION IN ACCORDANCE WITH THIS SECTION COLD-FORMED STEEL FRAMING SHALL BE ANCHORED DIRECTLY TO THE FOUNDATION OR FASTENED TO WOOD SILL PLATES ANCHORED TO THE FOUNDATION ANCHORAGE OF COLD-FORMED STEEL FRAMING AND SILL PLATES SUPPORTING COLD-FORME STEEL FRAMING SHALL BE IN ACCORDANCE WITH THIS SECTION SECTION R505.3.1 OR R603.3.1.

R404.1 CONCRETE AND MASONRY FOUNDATION WALLS. REFER TO SECTION 404.1 FOR FURTHER SPECIFICATIONS, NOTES AND DESIGN CRITERIA FOR CONCRETE AND MASONRY FOUNDATION WALLS.

R404.2 WOOD FOUNDATION WALLS. REFER TO SECTION 404 2 FOR EURTHER SPECIFICATIONS NOTES AND DESIGN CRITERIA FOR WOOD FOUNDATION WALLS.

R404.3 WOOD SILL PLATES. WOOD SILL PLATES SHALL BE A MINIMUM OF 2-INCH BY 4-INCH (51 MM BY 102 MM) NOMINAL LUMBER. SILL PLATE ANCHORAGE SHALL BE IN ACCORDANCE WITH SECTIONS R403.1.6 AND R602.11

WOOD SOLE PLATES AT ALL EXTERIOR WALLS ON MONOLITHIC R404.4 RETAINING WALLS. RETAINING WALLS THAT ARE NOT SLARS, WOOD SOLE PLATES OF RRACED WALL PANELS AT LATERALLY SUPPORTED AT THE TOP AND THAT RETAIN IN EXCESS OF 48 INCHES (1219 MM) OF UNBALANCED FILL, OR RETAINING WALLS EXCEEDING 24 INCHES (610 MM) IN HEIGHT THAT RESIS BUILDING INTERIORS ON MONOLITHIC SLABS AND ALL WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH MINIMUM 1/2-INCHDIAMETER (12.7 MM) ANCHOR BOLTS SPACED A MAXIMUM LATERAL LOADS IN ADDITION TO SOIL. SHALL BE DESIGNED IN OF 6 FEET (1829 MM) ON CENTER OR APPROVED ANCHORS OR ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE TO ANCHOR STRAPS SPACED AS REQUIRED TO PROVIDE EQUIVALEN ENSURE STARILITY AGAINST OVERTURNING SUDING EXCESSIVE FOUNDATION PRESSURE AND WATER UPLIFT. RETAINING WALLS ANCHORAGE TO 1/2-INCH-DIAMETER (12.7 MM) ANCHOR BOLTS. HALL BE DESIGNED FOR A SAFETY FACTOR OF 1.5 AGAINS BOLTS SHALL EXTEND A MINIMUM OF 7 INCHES (178 MM) INTO CONCRETE OR GROUTED CELLS OF CONCRETE MASONRY LINITS LATERAL SLIDING AND OVERTURNING. THIS SECTION SHALL NOT THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE APPLY TO FOUNDATION WALLS SUPPORTING BUILDINGS WIDTH OF THE PLATE. A NUT AND WASHER SHALL BE TIGHTENED R404.5 PRECAST CONCRETE FOUNDATION WALLS. ON EACH ANCHOR BOLT THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES (305 MM) OR LESS THAN SEVEN BOLT DIAMETERS REFER TO SECTION 404.5 FOR FURTHER SPECIFICATIONS. NOTES AND DESIGN CRITERIA FOR PRECAST CONCRETE FOUNDATION

FROM EACH END OF THE PLATE SECTION. INTERIOR BEARING

WALL SOLE PLATES ON MONOLITHIC SLAB FOUNDATION THAT ARE NOT PART OF A BRACED WALL PANEL SHALL BE POSITIVELY ANCHORED WITH APPROVED FASTENERS. SILL PLATES AND SOLE

PLATES SHALL BE PROTECTED AGAINST DECAY AND TERMITES

CATEGORIES C, DO, DI AND D2. IN ADDITION TO THE REQUIREMENTS OF SECTION R403.1.6, THE FOLLOWING REQUIREMENTS SHALL APPLY TO WOOD LIGHT-FRAME

STRUCTURES IN SEISMIC DESIGN CATEGORIES D0. D1 AND D2 AND

VOOD LIGHT-FRAME TOWNHOUSES IN SEISMIC DESIGN CAT. C

WHERE REQUIRED BY SECTIONS R317 AND R318

NOTE: SEE SECTION 403.1.6 FOR EXCEPTION

R403.1.6.1 FOUNDATION ANCHORAGE IN SEISMIC DESIGN

NOTE: SEE SECTION 403.1.6.1 FOR REQUIREMENTS

R403.1.7 FOOTINGS ON OR ADJACENT TO SLOPES. THE PLACEMENT OF BUILDINGS AND STRUCTURES ON OR

THREE LINITS HORIZONTAL (33 3-DERCENT SLOPE) SHALL

CONFORM TO SECTIONS R403.1.7.1 THROUGH R403.1.7.4

R403.1.8 FOUNDATIONS ON EXPANSIVE SOILS.

R403 2 FOOTINGS FOR WOOD FOUNDATIONS

HAVE A MAXIMUM SIZE OF 1/2 INCH (12.7 MM

ADJACENT TO SLOPES STEEPER THAN ONE UNIT VERTICAL IN

FOUNDATION AND FLOOR SLABS FOR BUILDINGS LOCATED ON

NOTE: SEE SECTION 403-1.8. FOR EXCEPTION AND EXPANSIVE

R4032 F00 INGS F00 WOOD F00 NDATIONS. F00 TINGS F00 WOOD F00 NDATIONS SHALL BE IN ACCORDANCE WITH FIGURES R403.1(2) AND R403.1(3). GRAVEL SHALL BE WASHED AND WELL GRADED. THE MAXIMUM SIZE STONE SHALL NOT

ORGANIC CLAYEY OR SILTY SOILS, SAND SHALL BE COARSE NOT

FROM ORGANIC, CLAYEY OR SILTY SOILS. CRUSHED STONE SHALL

FOR BUILDINGS WHERE THE MONTHLY MEAN TEMPERATURE OF

FOOTINGS ARE NOT REQUIRED TO EXTEND BELOW THE EROST

FOUNDATIONS PROTECTED FROM FROST IN ACCORDANCE WITH

FIGURE R403 3(1) AND TABLE R403 3(1) SHALL NOT BE LISED FOR

BASEMENTS OR CRAWL SPACES THAT ARE NOT MAINTAINED AT A

-R403.3.1 FOUNDATIONS ADJOINING FROST-PROTECTED SHALLOW

FOUNDATIONS -R403.3.2 PROTECTION OF HORIZONTAL INSULATION BELOW

R403.4 FOOTINGS FOR PRECAST CONCRETE FOUNDATIONS.

FOOTINGS FOR PRECAST CONCRETE FOUNDATIONS SHAL COMPLY WITH SECTION R403.4.

FOUNDATION AND RETAINING WALLS

THE BUILDING IS MAINTAINED AT A MINIMUM OF 64°F (18°C).

ACCORDANCE WITH FIGURE R403.3(1) AND TABLE R403.3(1)

INHEATED SPACES SUCH AS PORCHES, UTILITY ROOMS,

MINIMUM MONTHLY MEAN TEMPERATURE OF 64°E (18°C)

REFER TO SECTION 403 FOR THE FOLLOWING AREAS:

GROUND.

PA03 3 3 DPAINAGE

SECTION 404

-R403.3.4 TERMITE PROTECTION

GARAGES AND CARPORTS, AND SHALL NOT BE ATTACHED TO

LINE WHEN PROTECTED FROM FROST BY INSULATION I

EXCEED 3/4 INCH (19.1 MM), GRAVEL SHALL BE FREE FROM

SMALLER THAN 1/16-INCH (1.6 MM) GRAINS AND SHALL BE F

R403.3 FROST-PROTECTED SHALLOW FOUNDATIONS.

EXPANSIVE SOILS SHALL BE DESIGNED IN ACCORDANCE WI SECTION 1808.6 OF THE INTERNATIONAL BUILDING CODE.

WALLS

SECTION R405 FOUNDATION DRAINAGE

R405.1 CONCRETE OR MASONRY FOUNDATIONS DRAINS SHALL BE PROVIDED AROUND CONCRETE OR MASONRY FOUNDATIONS THAT RETAIN EARTH AND ENCLOSE HABITABLE OR USABLE SPACES LOCATED BELOW GRADE. DRAINAGE TILES, GRAVEL OR CRUSHED STONE DRAINS. PERFORATED PIPE OR OTHER APPROVED SYSTEMS OR MATERIALS SHALL BE INSTALLED AT OR BELOW THE AREA TO BE PROTECTED AND SHAL AT OR BELOW THE AREA TO BE PROTECTED AND SHALL DISCHARGE BY GRAVITY OR MECHANICAL MEANS INTO AN APPROVED DRAINAGE SYSTEM. GRAVEL OR CRUSHED STONE DRAINS SHALL EXTEND NOT LESS THAN 1 FOOT (305 MM) BEYOND THE OUTSIDE EDGE OF THE FOOTING AND 6 INCHES (152 MM) ABOVE THE TOP OF THE FOOTING AND BE COVERED WITH AN ABOVE THE TOP OF THE POOTING AND BE COVERED WITH AN APPROVED FILTER MEMBRANE MATERIAL. THE TOP OF OPEN JOINTS OF DRAIN TILES SHALL BE PROTECTED WITH STRIPS OF BUILDING PAPER. EXCEPT WHERE OTHERWISE RECOMMENDED BY THE DRAIN MANUFACTURER. PERFORATED DRAINS SHALL BE SUPPOUNDED WITH AN APPROVED FILTER MEMBRANE OR THE FILTER MEMBRANE SHALL COVER THE WASHED GRAVEL OR CRUSHED ROCK COVERING THE DRAIN. DRAINAGE TILES OR PERFORATED PIPE SHALL BE PLACED ON A MINIMUM OF 2 INCHES PERFORMED MIPS SHALL BE PLACED ON A MINIMUM OF 2 INCHES (51 MM) OF WASHED GRAVEL OR CRUSHED ROCK NOT LESS THAN ONE SIEVE SIZE LARGER THAN THE TILE JOINT OPENING OR PERFORMENT AND COVERED WITH NOT LESS THAN 6 INCHES (152 MM) OF THE SAME MATERIAL.

REFER TO SECTION 405 FOR FURTHER SPECIFICATIONS NOTES ND DESIGN CRITERIA FOR PRECAST CONCRETE FOUNDATION WALLS

SECTION R406 FOUNDATION WATER-PROOFING AND DAMP-PROOFING

REFER TO SECTION 405 FOR FURTHER SPECIFICATIONS. NOTES AND DESIGN CRITERIA FOR WATER-PROOFING AND DAMP-PROOFING FOUNDATIONS INCLUDING THE FOLLOWING AREAS

R406.1 CONCRETE AND MASONRY FOUNDATION DAMPPROOFING. -R406.2 CONCRETE AND MASONRY FOUNDATION WATERPROOFING RANG 3 DAMPEROOFING FOR WOOD FOUNDATIONS

R406.4 PRECAST CONCRETE FOUNDATION SYSTEM

SECTION R407 COLUMNS

REFER TO SECTION 407 FOR FURTHER SPECIFICATIONS, NOTES AND DESIGN CRITERIA FOR COLUMNS INCLUDING THE FOLLOWING ARFAS

B407 4 WOOD COLUMN PROTECTION R407.1 WOOD COLUMN PROTECTION. R407.2 STEEL COLUMN PROTECTION. R407.3 STRUCTURAL REQUIREMENTS.

SECTION R408 UNDER-FLOOR SPACE

 $\langle \Phi \rangle$ REFER TO SECTION 408 FOR FURTHER SPECIFICATIONS, NOTES AND DESIGN CRITERIA FOR UNDER-FLOOR SPACE INCLUDING THE FOLLOWING AREA:

-R408 1 VENTIL ATION R408.2 OPENINGS FOR UNDER-FLOOR VENTILATION. -R408.3 UN-VENTED CRAWL SPACE. -R408 4 ACCESS -R408.4 AUGESS. -R408.5 REMOVAL OF DEBRIS. -R408.6 FINISHED GRADE. -R408.7 FLOOD RESISTANCE.

CHAPTER 5 :: FLOORS

SECTION R501 GENERAL

R501.1 APPLICATION

THE PROVISIONS OF THIS CHAPTER SHALL CONTROL THE DESIGN AND CONSTRUCTION OF THE FLOORS FOR BUILDINGS, INCLUDING THE FLOORS OF ATTIC SPACES USED TO HOUSE MECHANICAL OR PLUMBING FIXTURES AND FOUIPMENT

R501.2 REQUIREMENTS.

ELCOR CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IN ACCORDANCE WITH SECTION R301 AND OF TRANSMITTING THE RESULTING LOADS TO THE SUPPORTING STRUCTURAL ELEMENTS

SECTION R502 WOOD FLOOR FRAMING

R502.1 GENERAL. WOOD AND WOOD-BASED PRODUCTS USED FOR LOAD-SUPPORTING PURPOSES SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THIS SECTION. SEE SECTIONS 502.1.1 THROUGH 502.1.7 FOR FURTHER SPECIFICATIONS.

R502.2 DESIGN AND CONSTRUCTION FLOORS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER, FIGURE R502.2 AND SECTIONS R317 AND R318 OR IN ACCORDANCE WITH ANSI AWC NDS. SEE SECTIONS 502.2.1 THROUGH 502.2.2 FOR FURTHER SPECIFICATIONS.

R502.3 ALLOWABLE JOIST SPANS.

NOLS ARLOWAUE SOLOT SPANE SPANS FOR FLOOR JOINT SHALL BE IN ACCORDANCE WITH TABLES R502.3.1(1) AND R502.3.1(2). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AWC STJR. SEE SECTIONS 502.3.1 THROUGH 502.3.3 FOR FURTHER SPECIFICATIONS

R502.4 JOISTS UNDER BEARING PARTITIONS. JOISTS UNDER PARALLEL BEARING PARTITIONS SHALL BE OF

ADEQUATE SIZE TO SUPPORT THE LOAD.DOUBLE JOISTS, SIZED TO ADECULATELY SUPPORT THE LOAD. THAT ARE SEPARATED TO PERMIT THE INSTALLATION OF PIPING OR VENTS SHALL BE FULL DEPTH SOLID BLOCKED WITH LUMBER NOT LESS THAN 2 INCHES (51 MM) IN NOMINAL THICKNESS SPACED NOT MORE THAN 4 FEET (1219 MM) ON CENTER BEARING PARTITIONS PERPENDICULAR TO JOISTS SHALL NOT BE OFFSET FROM SUPPORTING GIRDERS, WALLS OR PARTITIONS MORE THAN THE JOIST DEPTH UNLESS SUCH JOISTS ARE OF SUFFICIENT SIZE TO CARRY THE ADDITIONAL

R502.5 ALLOWABLE GIRDER AND HEADER SPANS. THE ALLOWABLE SPANS OF GIRDERS AND HEADERS FABRICATED

OF DIMENSION LUMBER SHALL NOT EXCEED THE VALUES SET FORTH IN TABLES R602.7(1), R602.7(2) AND R602.7(3)

R502.6 BEARING

THE ENDS OF EACH JOIST BEAM OR GIRDER SHALL HAVE NOT

LESS THAN 1 1/2 INCHES (38 MM) OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES (76 MM) ON MASONRY OR CONCRETE EXCEPT WHERE SUPPORTED ON A 1-INCH BY 4-INCH (25 MM BY 102 MM) RIBBON STRIP AND NAILED TO THE ADJACENT STUD OR BY THE USE OF APPROVED JOIST HANGERS. THE BEARING ON MASONRY OR CONCRETE SHALL BE DIRECT, OR A SILL PLATE OF 2-INCH-MINIMUM (51 mm) NOMINAL THICKNESS SHALL BE PROVIDED UNDER THE JOIST BEAM OR GIRDER. THE SINLE DE PROVIDED UNDER THE JOIST, DEWIN OR GIRDER. THE SILL PLATE SHALL PROVIDE A MINIMUM NOMINAL BEARING AREA OF 48 SQUARE INCHES (30 865 SQUARE MM). SEE SECTIONS 502.6.1 THROUGH 502.6.2 FOR FURTHER SPECIFICATIONS.

REFER TO THE IRC FOR FURTHER INFORMATION ON THE -R502.7 LATERAL RESTRAINT AT SUPPORTS.

-R502.8 CUTTING, DRILLING AND NOTCHING. P502.9 EASTENING -R502.10 FRAMING OF OPENINGS. -R502.11 WOOD TRUSSES. -R502.12 DRAFTSTOPPING REQUIRED. -R502.13 FIREBLOCKING REQUIRED

REFER TO THE IRC FOR THE FOLLOWING SECTIONS:

SECTION 503 ELOOR SHEATHING SECTION 503 PEODR SHEATHING SECTION 504 PRESSURE PRESERVATIVE TREATED WOOD FLOORS SECTION 505 COLD-FORMED STEEL FLOOR FRAMING

SECTION 506 CONCRETE FLOORS (ON GROUND)

R506.1 GENERAL. CONCRETE SLAB-ON-GROUND FLOORS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION OR ACI 332. FLOORS SHALL BE A MINIMUM 3 1/2 INCHES (89 MM) THICK (FOR EXPANSIVE SOILS, SEE SECTION R403.1.8). THE SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE SHALL BE AS SET FORTH IN SECTION R402.2

R506.2 SITE PREPARATION. THE AREA WITHIN THE FOUNDATION WALLS SHALL HAVE ALL

VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED.

FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ENSURE UNIFORM SUPPORT OF THE SLAB. AND EXCEPT WHERE APPROVED. THE FILL DEPTHS SHALL NOT EXCEED 24 INCHES (610 MM) FOR CLEAN SAND GRAVEL AND 8 INCHES (203 MM) FOR EAR

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2506 2 2 BASE

A 4-INCH-THICK (102 MM) BASE COURSE CONSISTING OF CLEAN GRADED SAND, GRAVEL, CRUSHED STONE, CRUSHED CONCRETE OR CRUSHED BLAST-FURNACE SLAG PASSING A 2- INCH (51 MM) SIEVE SHALL BE PLACED ON THE PREPARED SUBGRADE WHERE THE SLAB IS BELOW GRADE

NOTE: SEE SECTION 506.2.2. EOR EXCEPTION

P506 2 3 VAPOR RETARDER

A 6-MIL (0.006 INCH; 152 MM) POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6 INCHES (152 MM) SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAI AND THE BASE COURSE OR THE PREPARED SUBGRADE WHERE NO BASE COURSE EXISTS

P506 2 4 REINFORCEMENT SUPPORT

WHERE PROVIDED IN SLABS-ON-GROUND, REINFORCEMENT SHALL BE SUPPORTED TO REMAIN IN PLACE FROM THE CENTER TO UPPER ONE-THIRD OF THE SLAB FOR THE DURATION OF THE CONCRETE PLACEMENT

SECTION R507 DECKS

R507.1 DECKS.

WOOD-FRAMED DECKS SHALL BE IN ACCORDANCE WITH THIS SECTION OR SECTION R301 FOR MATERIALS AND CONDITIONS NOT PRESCRIBED HEREIN. WHERE SUPPORTED BY ATTACHMENT TO AN EXTERIOR WALL, DECKS SHALL BE POSITIVELY ANCHORED TO THE PRIMARY STRUCTURE AND DESIGNED FOR BOTH VERTICAL AND LATERAL LOADS. SUCH ATTACHMENT SHALL NOT BE ACCOMPLISHED BY THE USE OF TOENAILS OR NAILS SUBJECT TO WITHDRAWAL, WHERE POSITIVE CONNECTION TO THE PRIMARY

BUILDING STRUCTURE CANNOT BE VERIFIED DURING INSPECTION DECKS SHALL BE SELF-SUPPORTING. FOR DECKS WITH CANTILEVERED FRAMING MEMBERS CONNECTIONS TO EXTERIOF WALLS OR OTHER FRAMING MEMBERS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST UPLIFT RESULTING FROM THE FULL LIVE

LOAD SPECIFIED IN TABLE R301.5 ACTING ON THE CANTILEVERED PORTION OF THE DECK

R507.2 DECK LEDGER CONNECTION TO BAND JOIST

DECK LEDGER CONNECTIONS TO BAND JOISTS SHALL BE IN ACCORDANCE WITH THIS SECTION, TABLES R507.2 AND R507.2.1 AND FIGURES R507.2.1(1) AND R507.2.1(2), FOR OTHER GRADES. SPECIES, CONNECTION DETAILS AND LOADING CONDITIONS, DECK LEDGER CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R301. SEE SECTIONS 507.2.1 THROUGH 502.3.4 FOR ELIPTHER SPECIFICATIONS

R507.3 PLASTIC COMPOSITE DECK BOARDS, STAIR TREADS, GUARDS, OR HANDRAILS. PLASTIC COMPOSITE EXTERIOR DECK BOARDS, STAIR TREADS,

GUARDS AND HANDRAILS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM D 7032 AND THE REQUIREMENTS OF SECTION 507.3. SEE SECTIONS 507.3.1 THROUGH 502.3.5 FOR FURTHER SPECIFICATIONS.

R507.4 DECKING.

MAXIMUM ALLOWABLE SPACING FOR JOISTS SUPPORTING DECKING SHALL BE IN ACCORDANCE WITH TABLE R507.4. WOOD DECKING SHALL BE ATTACHED TO EACH SUPPORTING MEMBER WITH NOT LESS THAN (2) 8D THREADED NAILS OR (2) NO. 8 WOOD

R507.5 DECK JOISTS. MAXIMUM ALLOWABLE SPANS FOR WOOD DECK JOISTS, AS SHOWN IN FIGURE R507.5, SHALL BE IN ACCORDANCE WITH TABLE R507.5. DECK JOISTS SHALL BE PERMITTED TO CANTILEVER NOT GREATER THAN ONE-FOURTH OF THE ACTUAL. ADJACENT JOIST SPAN.

R507.5.1 LATERAL RESTRAINT AT SUPPORTS.

JOIST ENDS AND BEARING LOCATIONS SHALL BE PROVIDED WITH LATERAL RESTRAINT TO PREVENT ROTATION. WHERE LATERAL RESTRAINT IS PROVIDED BY JOIST HANGERS OR BLOCKING BETWEEN JOISTS, THEIR DEPTH SHALL EQUAL NOT LESS THAN 60 PERCENT OF THE JOIST DEPTH. WHERE LATERAL RESTRAINT IS PROVIDED BY RIM JOISTS, THEY SHALL BE SECURED TO THE END OF EACH JOIST WITH NOT LESS THAN (3) 10D (3-INCH ... E 0.128-INCH) NAILS OR (3) NO. 10 X 3-INCH (76 MM) LONG WOOD SCREWS.

R507.6 DECK BEAMS.

MAXIMUM ALLOWABLE SPANS FOR WOOD DECK BEAMS, AS SHOWN IN FIGURE R507.6, SHALL BE IN ACCORDANCE WITH TABLE R507.6. BEAM PLIES SHALL BE FASTENED WITH TWO ROWS OF 10D (3-INC) X 0.128-INCH) NAILS MINIMUM AT 16 INCHES (406 MM) ON CENTER ALONG EACH EDGE. BEAMS SHALL BE PERMITTED TO CANTILEVER AT EACH END UP TO ONE-FOURTH OF THE ACTUAL BEAM SPAN. SPLICES OF MULTI-SPAN BEAMS SHALL BE LOCATED AT INTERIOR POST LOCATIONS.

R507.7 DECK JOIST AND DECK BEAM BEARING.

R807.7 DECK JOIST AND DECK BEAM BEAKING. THE ENDS OF EACH JOIST AND BEAM SHALL HAVE NOT LESS THAN 1 1/2 INCHES (38mm) OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES (76 MM) ON CONCRETE OR MASONRY FO THE ENTIRE WIDTH OF THE BEAM. JOIST FRAMING INTO THE SIDE OF A LEDGER BOARD OR BEAM SHALL BE SUPPORTED BY

APPROVED JOIST HANGERS. JOISTS BEARING ON A BEAM SHALL BE CONNECTED TO THE BEAM TO RESIST LATERAL DISPLACEMENT.

R507 7 1 DECK POST TO DECK BEAM

R807.7.1 DECK POST TO DECK BEAM. DECK BEANS SHALL BE ATTACHED TO DECK POSTS IN ACCORDANCE WITH FIGURE R507.7.1 OR BY OTHER EQUIVALENT MEANS CAPABLE TO RESIST LATERAL DISPLACEMENT. MANUFACTURED POST-TO-BEAM CONNECTORS SHALL BE SIZED FOR THE POST AND BEAM SIZES. ALL BOLTS SHALL HAVE NOTE: SEE SECTION 507.7.1 FOR EXCEPTION

R507.8 DECK POSTS. FOR SINGLE-LEVEL WOOD-FRAMED DECKS WITH BEAMS SIZED IN ACCORDANCE WITH TABLE R507.6, DECK POST SIZE SHALL BE IN ACCORDANCE WITH TABLE R507.8.

8507.8.1 DECK POST TO DECK FOOTING POSTS SHALL BEAR ON FOOTINGS IN ACCORDANCE WITH SECTION R403 AND FIGURE R507.8.1. POSTS SHALL BE RESTRAINED TO PREVENT LATERAL DISPLACEMENT AT THE BOTTOM SUPPORT SUCH LATERAL RESTRAINT SHALL BE PROVIDED BY MANUFACTURED CONNECTORS INSTALLED IN ACCORDANCE WITH SECTION R507 AND THE MANUFACTURERS' INSTRUCTIONS OR A VINIMUM POST EMBEDMENT OF 12 INCHES (305 MM) IN SURROUNDING SOILS OR CONCRETE PIERS

CHAPTER 6 :: WALL CONSTRUCTION

SECTION R601 GENERAL

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R601.1 APPLICATION. THE PROVISIONS OF THIS CHAPTER SHALL CONTROL THE DESIGN AND CONSTRUCTION OF WALLS AND PARTITIONS FOR BUILDI

R601.2 REQUIREMENTS. WALL CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS INFOSED IN ACCORDANCE WITH SECTION R301 AND OF TRANSMITTING THE RESULTING LOADS TO THE SUPPORTING STRUCTURAL ELEMENTS.

SECTION R602 WOOD WALL FRAMING

R602.1 GENERAL. WOOD AND WOOD-BASED PRODUCTS USED FOR LOAD SUPPORTING PURPOSES SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THIS SECTION. SEE SECTIONS 602.6.1 THROUGH 502.6.10 FOR UNTHER SPECIFICATIONS. R602.2 GRADE. STUDS SHALL BE A MINIMUM NO. 3, STANDARD OR

NOTE: SEE SECTION 506.2.2. FOR EXCEPTION

R602.3 DESIGN AND CONSTRUCTION R WALLS OF WOODFRAME CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE ISIONS OF THIS CHAPTER AND FIGURES R602.3(1) AND R602 3(2) OR IN ACCORDANCE WITH AWC NDS. COMPONENTS OF OR WALLS SHALL BE FASTENED IN ACCORDANCE WITH TABLES R602 3(1) THROUGH R602 3(4) WALL SHEATHING SHALL BE TENED DIRECTLY TO ERAMING MEMBERS AND WHERE PLACED ON THE EXTERIOR SIDE OF AN EXTERIOR WALL, SHALL BE CAPABLE OF RESISTING THE WIND PRESURES LISTED IN TABLE R331 22) ADJASTED FOR HEICHT AND EXPOSIZE USING TABLE R331 22) ADJASTED FOR HEICHT AND EXPOSIZE USING TABLE R331 22) ADJASTED FOR HEICHT AND EXPOSIZE USING TABLE STUDIES HALL BE CONTINUOUS FROM THE REQUIREMENTS FOR EXPOSIZE STABLE CONTINUOUS FROM THE SOLE PLATE TO A SUPPORT AT THE TOP PLATE TO RESIST LOADS PERPENDICULAR CONTINUOUS FROM THE SOLE FOUNDATION OR FLOOR. CELING OR ROOF DUMPHICAGI OR SHALL FOUNDATION OR FLOOR. CELING OR ROOF DUMPHICAGI OR SHALL FOUNDATION OR FLOOR. CELING OR ROOF DUMPHICAGI OR SHALL PROTEIDE. ON THE EXTERIOR SIDE OF AN EXTERIOR WALL SHALL BE PRACTICE.

NOTE: SEE SECTION 506.2.3 FOR EXCEPTION

SEE SECTIONS 602.3.1 THROUGH 603.3.5 FOR FURTHER SPECIFICATIONS.

REFER TO THE IRC FOR FURTHER INFORMATION ON THE

FOLLOWING AREAS R602.4 INTERIOR LOAD-BEARING WALLS. R602.5 INTERIOR NONBEARING WALLS. R602.6 DRILLING AND NOTCHING OF STUDS. R602.9 CRIPPLE WALLS.

R602 10 WALL BRACING

R02.10 WALL BRACING. BUILDINGS SHALL BE BRACED IN ACCORDANCE WITH THIS SECTION OR, WHEN APPLICABLE. SECTION R02.12, WHERE A BUILDING, OR PORTION THEREFOR DOES NOT COMPY WITH ONE OR MORE OF THE BRACING REQUIREMENTS IN THIS SECTION, THOSE PORTIONS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTION R01.1.

REFER TO SECTIONS 602.10.1 THROUGH 602.10.12 FOR BRACED ALL PANELS, DESIGN AND CRITERIA

REFER TO THE IRC FOR THE FOLLOWING SECTIONS:

SECTION 643 COLD-FORMED STEEL WALL FRAMING SECTION 644 WOOD STRUCTURAL PANELS SECTION 645 CARTACLEBOARD SECTION 645 CARTACLEBOARD SECTION 645 CARTACLEBOARD SECTION 645 CARTEROR CONC. WALL CONSTRUCTION SECTION 645 CARTEROR CONC. WALL CONSTRUCTION SECTION 645 STRUCTURAL INSULATED PANEL WALL CONSTRUCTURAL

R703 & ELASHING

SPECIFICATIONS

FOLLOWING AREAS

WITH DRAINAGE.

WOOD FRAMING.

R802.1 GENERAL

SPECIFICATIONS

APPROVED CORROSION-RESISTANT FLASHING SHALL

THE BUILDING STRUCTURAL FRAMING COMPONENTS.

BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY

OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO

SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY

EXTERIOR WALLS SHALL COMPLY WITH AAMA 714 THE FLASHING

SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH.

EXTERIOR WINDOW AND DOOR OPENINGS FLASHING AT

EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE

WATER-RESISTIVE BARRIER COMPLYING WITH SECTION 703.2 FO

SUBSECUENT ORAINAGE, MECHANICALLY ATTACHED ELEVIRI E

EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN

APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE

SURFACE OF THE EXTERIOR WALL FINISH OR TO THE

FLASHINGS SHALL COMPLY WITH AAMA 712. FLASHING AT

ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING:

REFER TO THE IRC FOR FURTHER INFORMATION ON THE

-R703.5 WOOD, HARDBOARD AND WOOD STRUCTURAL PANEL

-R703.8 ANCHORED STONE AND MASONRY VENEER, GENERAL.

-R703.9 EXTERIOR INSULATION AND FINISH SYSTEM (FIES)/FIES

-R703.15 CLADDING ATTACHMENT OVER FOAM SHEATHING TO

-R703.16 CLADDING ATTACHMENT OVER FOAM SHEATHING TO

-R703.17 CLADDING ATTACHMENT OVER FOAM SHEATHING TO

CHAPTER 8 :: WOOD ROOF FRAMING

WOOD AND WOOD-BASED PRODUCTS USED FOR LOAD

SEE SECTIONS 802.1.1 THROUGH 802.1.7 FOR FURTHER

UNITS HORIZONTAL (25-PERCENT SLOPE) OR GREATER.

FASTENED IN ACCORDANCE WITH TABLE R602.3(1)

ROOF-CEILINGS SHALL BE DESIGNED AND CONSTRUCTED

IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER AND

FIGURES R606.11(1), R606.11(2) AND R606.11(3) OR IN ACCORDANCE WITH AWC NDS. COMPONENTS OF ROOF-CEILINGS SHALL BE

RAFTERS SHALL BE FRAMED NOT MORE THAN 1 1/2-INCHES (38 MM)

OFFSET FROM EACH OTHER TO RIDGE BOARD OR DIRECTLY

OPPOSITE FROM EACH OTHER WITH A GUSSET PLATE AS A TIE.

RIDGE BOARD SHALL BE NOT LESS THAN 1-INCH (25 MM) NOMINAI

THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF THE

RAFTER. AT VALLEYS AND HIPS THERE SHALL BE A VALLEY OR HIP

RAFTERNOT LESS THAN 2-INCH (51 MM) NOMINAL THICKNESS AND

NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER. HIP AND

BRACE TO A BEARING PARTITION OR BE DESIGNED TO CARRY AND

DISTRIBUTE THE SPECIFIC LOAD AT THAT POINT WHERE THE ROOF PITCH IS LESS THAN THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT SLOPE), STRUCTURAL MEMBERS THAT

SUPPORT RAFTERS AND CEILING JOISTS, SUCH AS RIDGE REAMS

VALLEY RAFTERS SHALL BE SUPPORTED AT THE RIDGE BY A

SUPPORTING PURPOSES SHALL CONFORM TO THE APPLICABLE

THE FRAMING DETAILS REQUIRED IN SECTION R802 APPLY TO ROOFS HAVING A MINIMUM SLOPE OF THREE UNITS VERTICAL IN 12

ASONRY OR CONCRETE WALL CONSTRUCTION

-R703.11 VINYL SIDING. -R703.12 ADHERED MASONRY VENEER INSTALLATION

REFER TO SECTION 1.1 THROUGH 1.3 FOR FURTHER

-R703.6 WOOD SHAKES AND SHINGLES.

-R703.7 EXTERIOR PLASTER

-R703.10 FIBER CEMENT SIDING.

P703 13 INSULATED VINYL SIDING

-R703.14 POLYPROPYLENE SIDING

COLD-EORMED STEEL ERAMIN

PROVISIONS OF THIS SECTION

R802.2 DESIGN AND CONSTRUCTION.

R802.3 FRAMING DETAILS

INSTALLED AT THE FOLLOWING LOCATIONS

WITH AAMA 711. FLUID-APPLIED MEMBRANES USED AS FLASHING IN

SECTION 609 EXTERIOR WINDOWS AND DOORS.

R609 1 GENERAL THIS SECTION PRESCRIBES PERFORMANCE AND CONSTRUCTION REQUIREMENTS FOR EXTERIOR WINDOWS AND DOORS INSTALLED IN WALLS, WINDOWS AND DOORS SHALL BE INSTALLED AND ELASHED IN ACCORDANCE WITH THE FENESTRATION MANUFACTURER'S WRITTEN INSTRUCTIONS. WINDOW AND DOOR OPENINGS SHALL BE FLASHED IN ACCORDANCE WITH SECTION R703.4. WRITTEN INSTALLATION INSTRUCTIONS SHALL BE DED BY THE FENESTRATION MANUFACTURER FOR EACH WINDOW OR DOOR

R609.2 PERFORMANCE, EXTERIOR WINDOWS AND DOORS SHALL BE DESIGNED TO RESIST THE DESIGN WIND LOADS SPECIFIED IN TABLE R301.2(2) ADJUSTED FOR HEIGHT AND EXPOSURE IN ACCORDANCE WITH TABLE R301.2(3) OR DETERMINED IN ACCORDANCE WITH ASCE 7 USING THE ALLOWABLE STRESS DESIGN LOAD COMBINATIONS OF ASCE 7. DESIGN WIND LOADS FOR EXTERIOR GLAZING NOT PART OF A LABELED ASSEMBLY SHALL BE PERMITTED TO BE DETERMINED IN ACCORDANCE WITH CHAPTER 24 OF THE INTERNATIONAL BUILDING CODE.

R609.4 GARAGE DOORS. GARAGE DOORS SHALL BE TESTED IN ACCORDANCE WITH EITHER ASTM E 330 OR ANSI/DASMA 108, AND SHALL MEET THE ACCEPTANCE CRITERIA OF ANSI/DASMA 108. CHAPTER 7 :: INTERIOR COVERING

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R702.1 GENERAL. INTERIOR COVERINGS OR WALL FINISHES SHALL BE INSTALLED IN ACCORDANCE WITH THIS CHAPTER AND TABLE R702.1(1), TABLE R702.1(2), TABLE R702.1(3) AND TABLE R702.3.5. INTERIOR MASONRY VENEER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.1 FOR SUPPORT AND SECTION R703.7.4 FOR SECTION RVIS.7.1 FOR SOPPORT AND SECTION RVIS.7.4 FOR ANCHORAGE, EXCEPT AN AIRSPACE IS NOT REQUIRED. INTERIOR FINISHES AND MATERIALS SHALL CONFORM TO THE FLAME SPREAD AND SMOKE DEVELOPMENT REQUIREMENTS OF SECTION

SEE SECTIONS 702.2 THROUGH 502.7 FOR FURTHER SPECIFICATIONS

SECTION R703 EXTERIOR COVERING

EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN SECTION R703 4 R703.2 WATER-RESISTIVE BARRIER. ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND ORE DATER OF NO. 10 ASPTACT PET, THEE PROMITOLES AND BREAKS, COMPLYING WITH ASTM D 226 FOR TYPE 1 FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED VER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FEL OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHEST (51 MM). WHERE JOINTS OCCUR. FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES (152 MM) THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION R703.1. THE WATER-RESISTIVE BARRIER IS NOT REQUIRED FOR DETACHED ACCESSORY BUILDINGS

R703.3.2 FASTENERS.

EXTERIOR WALL COVERINGS SHALL BE SECURELY FASTENED WITH ALUMINUM, GALVANIZED, STAINLESS STEEL OR RUST-PREVENTATIVE COATED NAILS OR STAPLES IN ACCORDANCE WITH TABLE R703.3(1) OR WITH OTHER APPROVED CORROSION-RESISTANT FASTENERS IN ACCORDANCE WITH THE WALL COVERING MANUFACTURER'S INSTALLATION INSTRUCTIONS, NAILS AND STAPLES SHALL COMPLY WITH ASTM F 1667. NAILS SHALL BE T-HEAD, MODIFIED ROUND HEAD, OR ROUND HEAD WITH SMOOTH OR DEFORMED SHANKS. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16 INCH (11.1 MM) OUTSIDE DIAMETER AND BE MANUFACTURED OF MINIMUM 16-GAGE WIRE. WHERE FIBERBOARD, GYPSUM, OR FOAM PLASTIC SHEATHING BACKING IS USED, NAILS OR STAPLES SHALL BE DRIVEN INTO THE STUDS. WHERE WOOD OR WOOD STRUCTURAL PANEL SHEATHING IS USED, FASTENERS SHALL BE DRIVEN INTO STUDS UNLESS OTHERWISE PERMITTED TO BE DRIVEN INTO STUDS UNLESS ACCORDANCE WITH EITHER THE SIDNIG MANUFACTURER'S INSTALLATION INSTRUCTIONS OR TABLE R703.3.2.

HIPS AND VALLEYS. SHALL BE DESIGNED AS BEAMS. REFER TO THE IRC FOR FURTHER INFORMATION ON THE FOLLOWING AREAS:

R802.4 ALLOWABLE CEILING JOIST SPANS. R802.5 ALLOWABLE RAFTER SPANS R802.6 BEARING.

8802.7 CUTTING, DRILLING AND NOTCHING R802.8 LATERAL SUPPORT. R802.9 FRAMING OF OPENINGS

P802 10 WOOD TRUSSES

R802.10.1 TRUSS DESIGN DRAWINGS. TRUSS DESIGN DRAWINGS. PREPARED IN CONFORMANCE TO SECTION R802.10.1, SHALL BE PROVIDED TO THE BUILDING OFFICIAL AND APPROVED PRIOR TO INSTALLATION. TRUSS DESIGN DRAWINGS SHALL BE PROVIDED WITH THE SHIPMENT OF TRUSSES DELIVERED TO THE JOB SITE. TRUSS DESIGN DRAWINGS SHALL INCLUDE. AT A MINIMUM. THE FOLLOWING INFORMATION

REFER TO SECTION 802 10 1 (1-12 FOR MINIMUM INFORMATION)

R802.10.2 DESIGN

WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL COMPLY WITH ANSI/TPI 1. THE TRUSS DESIGN DRAWINGS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL WHERE REQUIRED BY THE STATUTES OF THE JURISDICTION IN WHICH THE PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION

R802.10.3 BRACING. TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS. SPECIFIED IN THE CONSTRUCTION DOCUMENTS FOR THE BUILDING AND ON THE INDIVIDUAL TRUSS DESIGN DRAWINGS. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS, TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICE SUCH AS THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BDSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD

P802 10 4 ALTERATIONS TO TRUSSES

TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE APPROVAL OF A REGISTERED DESIGN PROFESSIONAL ALTERATIONS RESULTING IN THE ADDITION OF LOAD SUCH AS HVAC EQUIPMENT WATER HEATER THAT EXCEEDS THE DESIGN LOAD FOR THE TRUSS SHALL NOT BE PERMITTED WITHOUT VERIFICATION THAT THE TRUSS IS CAPABLE OF SUPPORTING SUCH ADDITIONAL LOADING.

R802.11 ROOF TIE-DOWN

P802 11 1 LIDI JET RESISTANCE ROOFASSEMBLIES SHALL HAVE UPLIFT RESISTANCE IN ACCORDANCE WITH SECTIONS R802.11.1.1 AND R802.11.1.2. WHERE THE UPLIFT FORCE DOES NOT EXCEED 200 POUNDS (90.8 KG), RAFTERS AND TRUSSES SPACED NOT MORE THAN 24 INCHES (610 MM) ON CENTER SHALL BE PERMITTED TO BE ATTACHED TO THEIR SUPPORTING WALL ASSEMBLIES IN ACCORDANCE WITH TABLE R602.3(1). WHERE THE BASIC WIND SPEED DOES NOT EXCEED 115 MPH. THE WIND EXPOSURE CATEGORY IS B, THE ROOF PITCH IS 5:12 OR GREATER, AND THE ROOF SPAN IS 32 FEET (9754 MM) OR LESS, RAFTERS AND TRUSSES SPACED NOT MORE THAN 24 INCHES (610 MM) ON CENTER SHALL BE PERMITTED TO BE ATTACHED TO THEIR SUPPORTING WALLASSEMBLIES IN ACCORDANCE WITH TABLE R602.3(1).

R802.11.1.1 TRUSS UPLIFT RESISTANCE.

TRUSSES SHALL BE ATTACHED TO SUPPORTING WALL ASSEMBLIES BY CONNECTIONS CAPABLE OF RESISTING UPLIET FORCES AS SPECIFIED ON THE TRUSS DESIGN DRAWINGS FOR THE ULTIMATE DESIGN WIND SPEED AS DETERMINED BY FIGURE R301.2(4)A AND LISTED IN TABLE R301.2(1) OR AS SHOWN ON THE CONSTRUCTION DOCUMENTS. UPLIFT FORCES SHALL BE $\langle \Phi \rangle$ PERMITTED TO BE DETERMINED AS SPECIFIED BY TABLE PRO2 11 IF APPLICABLE, OR AS DETERMINED BY ACCEPTED ENGINEERING PRACTICE

R802.11.1.2 RAFTER UPLIFT RESISTANCE.

INDIVIDUAL RAFTERS SHALL BE ATTACHED TO SUPPORTING WALL ASSEMBLIES BY CONNECTIONS CAPABLE OF RESISTING UPLIFT FORCES AS DETERMINED BY TABLE R802.11 OR AS DETERMINED BY ACCEPTED ENGINEERING PRACTICE. CONNECTIONS FOR BEAMS USED IN A ROOF SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE

REFER TO THE IRC FOR THE FOLLOWING SECTIONS:

SECTION 803 ROOF SHEATHING CTION 804 COLD-FORMED STEEL ROOF FRAMING

SECTION 805 CEILING FINISHES

R805.1 CEILING INSTALLATION

CEILINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS FOR INTERIOR WALL FINISHES AS PROVIDED IN SECTION R702

SECTION R806

ROOF VENTILATION R806.1 VENTILATION REQUIRED. ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE LINDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN 1/4 INCH (6.4 MM) SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH OR SIMILAR MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED

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R806.2 MINIMUM VENT AREA. THE MINIMUM NET FREE VENTILATING AREA SHALL BE 1/150 OF THE AREA OF THE VENTED SPACE.

VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTS

NOTE: SEE SECTION 806.2 FOR EXCEPTION

R806.3 VENT AND INSULATION CLEARANCE

WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. NOT LESS THAN A 1-INCH (25 MM) SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT.

R806.4 INSTALLATION AND WEATHER PROTECTION.

ΔIR

VENTILATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. INSTALLATION OF VENTILATORS IN ROOF SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R903. INSTALLATION OF VENTILATORS IN WALL SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R703.1

8806.5 UNVENTED ATTIC AND UNVENTED ENCLOSED RAFTER ASSEMBLIES. UNVENTED ATTICS AND UNVENTED ENCLOSED ROOF FRAMING

ASSEMBLIES CREATED BY CEILINGS THAT ARE APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS AND STRUCTURAL ROOF SHEATHING APPLIED DIRECTLY TO THE TOP OF THE ROOF FRAMING MEMBERS/RAFTERS, SHALL BE PERMITTED WHERE ALL THE FOLLOWING CONDITIONS ARE MET

BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION

SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT

HAVE A VERTICAL HEIGHT OF 30 INCHES (762 MM) OR GREATER

VERTICAL HEIGHT SHALL BE MEASURED FROM THE TOP OF THE

CEILING FRAMING MEMBERS TO THE UNDERSIDE OF THE ROOF

THE ROUGH-FRAMED OPENING SHALL BE NOT LESS THAN 22

INCHES BY 30 INCHES (559 MM BY 762 MM) AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. WHERE

LOCATED IN A WALL. THE OPENING SHALL BE NOT LESS THAN 22

INCHES WIDE BY 30 INCHES HIGH (559 MM WIDE BY 762 MM HIGH).

UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE 30

INCHES (762 MM) AT SOME POINT ABOVE THE ACCESS MEASURED

VERTICALLY FROM THE BOTTOM OF CEILING FRAMING MEMBERS.

R001 1 SCOPE THE PROVISIONS OF THIS CHAPTER SHALL COVERN

THE DESIGN, MATERIALS, CONSTRUCTION AND QUALITY OF ROOF

CHAPTER 10 :: CHIMNEYS & FIREPLACES

MASONRY FIREPLACES SHALL BE CONSTRUCTED IN ACCORDANCE

WITH THIS SECTION AND THE ADDI ICABLE DROVISIONS OF

SEE SECTION M1305.1.3 FOR ACCESS REQUIREMENTS WHERE

WHERE THE ACCESS IS LOCATED IN A CEILING MINIMUM

MECHANICAL FOUIPMENT IS LOCATED IN ATTICS.

SECTION R901 GENERAL

ASSEMBLIES

P1001 1 GENERAL

CHAPTERS 3 AND 4.

CHAPTER 9 :: ROOF ASSEMBLIES

OVER AN AREA OF NOT LESS THAN 30 SQUARE FEET (2.8 M2). THE

SEE CONDITIONS 806.5 (1 THROUGH 5)

SECTION R807 ATTIC ACCESS

R807.1 ATTIC ACCESS.

FRAMING MEMBERS.

1211 S Walnut St Bloomington, IN 47401

Patrick Riggs

Subject: 2415 Fountain Dr. – Karst Survey Bloomington, IN

Mr. Riggs,

Hydrogeology Inc. (HGI) respectfully submits this summary report for the karst survey conducted at 2415 Fountain Dr. in Bloomington, IN (the Site, Figure 1).

1 - Overview

The Site is located at 2415 Fountain Dr. in Bloomington, Indiana and is approximately 0.6-acres (Figures 1 & 2). The purpose of this survey was to evaluate a known sinkhole at the Site. The Site currently consists primarily of woods.

2 - Geology / Physiography

The Site is in the Mitchell Plateau physiographic region, which is one of the primary karst forming areas in Indiana. The bedrock at the Site is the St. Louis Limestone (Hasenmueller, Estell, Keith, and Thompson, 2008). The St. Louis Limestone is composed of primarily of thinly bedded limestone and is known for karst development.

3 – Sinkholes & Springs

Sinkholes are surface depressions that form in a variety of ways in karst areas (Figure 3). Sinkholes often have a swallow hole, which is an opening in the ground where water infiltrates. Groundwater flow in karst areas is predominantly fracture flow, meaning the bedrock itself has low permeability while the fractures in the bedrock are open conduits that allow water, soil, and other materials to travel quickly through the subsurface. Water that drains into a sinkhole can eventually discharge at a karst spring (Figure 4).

4 – Karst Desktop Review

A review of available karst resources was conducted prior to the field survey. These resources include United State Geological Survey (USGS) topographic maps, Indiana Map 2011 1-ft LIDAR, karst spring maps, and private cave databases. One sinkhole was identified at the Site based on the USGS topographic map and LIDAR data. The

Date: February 6, 2025

Contact: Jason Krothe

Phone: 812-219-0210

Email: jnkrothe@hydrogeologyinc.com

hydrogeology inc.

1211 S Walnut St Bloomington, IN 47401

sinkhole center is located on the property directly west of the Site (Figure 1). Using 2-ft topographic contours, the last closed contour for this sinkhole would be 862 ft. The sinkhole is also part of a larger compound sinkhole that extends across multiple properties (Figure 2). Based on 2-ft topographic contours, the last closed contour for the larger sinkhole is 866 ft.

5 – Karst Field Survey

HGI conducted a field review of the Site on January 31, 2025 (Photos in Appendix A). The proposed building footprint was inspected for the presence of karst development including soil piping and ground subsidence. No obvious signs of karst development were observed.

6 – Study Limitations

The identification of karst features at the Site was limited to surface inspection. No subsurface investigations were conducted. Undocumented karst features are possible in the subsurface.

7 – Recommendations

The following steps are recommended prior to making a final evaluation regarding karst at the Site:

- 1. Determine with the City of Bloomington the correct elevation (862 or 866) for the last closed sinkhole contour.
- Evaluate the need for a field survey based on the confirmed elevation. If, after reviewing the correct elevation in relation to the proposed house location, concerns remain regarding proximity to the sinkhole boundary, a survey should be conducted to mark the elevation on the property for further assessment.

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HGI appreciates the opportunity to provide this summary report. If you have any questions, concerns, or comments please do not hesitate to contact me directly at (812) 219-0210.

Sincerely,

Hydrogeology Inc.

Jason N. Krothe, LPG IN-2511 President



hydrogeology inc.

1211 S Walnut St Bloomington, IN 47401

References

Hasenmueller, W. A., Estell, C. M., Keith, B., and Thompson, T. A., 2009, Bedrock geologic map of Monroe County, Indiana: Indiana Geological Survey Miscellaneous Map 73, scale 1:48,000.

4




Last Closed 2-FT topographic Contour

hydrogeology inc.

FIGURE

2







Karst Survey - 2415 Fountain Dr Appendix A



Coordinates (UTM Meters)

NA

Photograph Date: 1-31-25

Comments: Northeast corner of building outline.

Recommended treatment: NA



77



Photograph Number:

4

Coordinates (UTM Meters) NA

Photograph Date: 1-31-25

Comments: Southwest corner of building outline.

Recommended treatment: NA





Drainage running east to west through the Site. .

Recommended treatment: NA



⁸⁰ Karst Survey - 2415 Fountain Dr Appendix A





Photograph Number: 10 Coordinates (UTM Meters) NA Photograph Date: 1-31-25 Comments: Center of the Site looking west.

Recommended treatment: SCA





Photograph Number:

12

Coordinates (UTM Meters) NA

Photograph Date: 1-31-25

Comments: West side of the Site looking east.

Recommended treatment: NA







RENEWAL SEPTIC PERMIT

DATE PERMIT ISSUED:

SITE INFORMATION: Name of Applicant: State Parcel #:

Owner Name:

Subdivision Lot #: Number of Bedrooms:

System

Owner Address Site Address:

Patrick Riggs 53-05-31-100-018.000-005 Riggs, Patrick D Jr 2415 W Fountain Dr 2415 W Fountain DR Bloomington, IN 47404-2780 N/A N/A 2 Bedroom Capacity of the Proposed Septic 5

December 5, 2024

SEPTIC SYSTEM SPECIFICATIONS:

Septic Tank Size (gal.): Pump Tank Size (gal.): Type of Septic System: Septic Field Size (ft. x ft.): Depth of cut (in.): Min. Depth of # 23 sand (in.): Number of Pipes: Length of each Pipe (ft.): Total Linear foot of pipe: Low Vent Required: High Vent Required: Subsurface Drainage: Depth of Subsurface Drain (in.): 1000 gal Sexton Wilbert and 1500 gal Sexton Wilbert N/A subsurface, sand-lined, Presby AES 72 feet x 24 feet 10 in 6 in 5 70 feet 350 total linear feet Yes Perimeter Drain on all sides 46 in

ADDITIONAL COMMENTS:

Install according to septic site plans submitted by Lloyd Moore

DISCLAIMER By the ministerial issuance of this permit, the Monroe County Health Department does not certify the compliance of the planned residential sewage system with the applicable administrative rule of the Indiana Department of Health concerning residential onsite sewage systems. ANY DEVIATIONS FROM THIS PERMIT MUST BE PRE-APPROVED BY THE MONROE COUNTY HEALTH DEPARTMENT. Duration of Permit: Permit Expires 2 years from May 3, 2024

Staf chother

Dr. Philip Clark Brittain Monroe County Health Officer

Permit ID WW-23-296

Shian'ah Cox Senior Environmental Health Specialist

PETITIONER:	David Parsch 3802 East 3rd Street Bloomington, IN
OWNER:	BMI Properties LLC 3630 East Commodore Trail Bloomington, IN

REQUEST: Petitioner is requesting a variance from side and rear setback standards to allow a vertical addition to an existing detached single-family dwelling structure by adding a second floor with the same setbacks as the existing first floor in the Mixed-Use Student Housing (MS) zoning district.

REPORT: The property contains a detached single-family dwelling on the east side of North Lincoln Street between East 16th Street and East 17th Street in the Garden Hill neighborhood. The property is located in the Mixed-Use Student Housing (MS) zoning district and in the Garden Hill Historic District. All surrounding properties are also in the MS zoning district and the historic district and contain residential structures with one to four dwelling units each.

The existing one-story house on the property contains two bedrooms. The petitioner proposes to construct a second story and remodel the interior to provide five bedrooms. The second story is proposed to match the footprint of the existing ground floor with the same existing setbacks from front, side, and rear property lines. The Unified Development Ordinance (UDO) establishes a minimum building setback of 15 feet for front, side, and rear property lines alike in the MS zoning district. The south side setback, both existing and proposed, complies with this standard. The existing west (front), north (side), and east (rear) setbacks are less than 15 feet but are lawful nonconforming. A veritical addition of a second story, however, much comply with the standards in the current UDO.

The front setback is 11.72 feet, but the second story can utilitize an exception to setback requirements for additions to existing primary structures listed in UDO table 04-6: "Vertical additions to existing primary structures may utilize existing front setbacks provided that the existing structure is equal to, or has a greater front setback than, the median front setback of abutting residential structures." Because the abutting residential structure to the south, the house at 303 East 16th Street, is set back less than 11 feet from Lincoln Street, the proposed second story front setback complies with current UDO standards.

The north side setback is 5.47 feet and the east rear setback is 3.4 feet, both less than the required 15 feet. The petitioner is requesting a variance to allow the second story to use these established setbacks.

Because the property is located in a historic district, the proposed vertical addition requires a certificate of appropriateness (CoA). The petitioner's application for a CoA was heard by the Historic Preservation Commission (HPC) on February 13. The HPC continued the case to the next meeting without making a final decision in order to give the applicant time to respond to commissioner's comments and provide more details on the architectural design of the proposed second story.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDING: Allowing a second story to use the established side and rear setbacks will not be injurious to the public health, safety, morals, and general welfare of the community. The north side of the property abuts an alley which provides additional separation. Even with a reduced setback, there will still be more than 15 feet from the north building wall to the nearest property line to the north. Using the established east rear setback will provide less ventilation, less fire separation, and less aesthetic visual separation between buildings than desirable for this location, based on the setback standards for this zoning district. However, the remodel will comply with all minimum standards for building construction and fire protection, and the overall impact on public health, safety, morals, and general welfare will be minimal.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING: Make more explicit. Allowing a second story to use the established side and rear setbacks will not substantially affect the use and value of neighboring properties. Adding more neighbors and potential noise within close proximity may affect the desirability of the dwelling units in the apartment to the east, but any effect will not be significant and is a normal, expected aspect of life and development within the context of this neighborhood.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING: The small size of the property is a peculiar feature. The property dimensions are 62 feet by 50 feet, containing 3,100 square feet, compared to the minimum lot area standard for the MS zoning district of 5,000 square feet. The small lot size limits the size of any potential structure on the property, and the terms of the UDO as applied to the existing structure result in a practical limit of no more than the existing two bedrooms. The MS district allows dwelling units to be occupied by up to five unrelated adults, and the existing use of

other properties in the surrounding neighborhood indicate that renting the house to five unrelated individuals would be the most profitable and desirable for the property owner. However, this does not result in practical difficulties in the use of the property. The property has contained a two-bedroom house for many years and could continue as a two-bedroom house into the future with no evidence of not being able to produce a reasonable rate of return.

RECOMMENDATION: Based upon the written findings above, the Department recommends that the Board of Zoning Appeals adopt the proposed findings for V-03-25 / VAR2025-01-0060 and deny the requested variance.





Location Map



Created: 2/14/2025 Map By: Gabriel Holbrow

To whom it may concern,

The Brawley Group is petitioning for a variance on the rear (east) and side (north) setbacks in order to proceed with permitting for remodeling and upgrading the home at 1200 N Lincoln St. The proposed plan would include adding a second story, which would allow the unit to be upgraded from a 2 Bedroom 1 Bath home to a 5 Bedroom 5 Bath home.

The renovations to this property will not be contrary to the public interest or the spirit of the UDO. The property is located among other properties being utilized for the same general purpose and will not negatively impact those properties. The renovations will add housing in the area without expanding the current structure's footprint and will improve significantly upon the current appearance of the property.

Given the rear/east setback and the parcel size, as the structure is situated on the parcel now, it is not in compliance with the current UDO. Thus, if not for the requested variance, the proposed renovations and improvements to this structure would not be allowed without relocating the entire structure. Allowing a variance would allow for improvement to the aesthetics of the property and the neighborhood, without the practical difficulties and unnecessary hardship of moving the entire structure. In addition, we are working and will continue to work with the Garden Hill Historic District to create a home with like appearance and build to ensure congruence within the neighborhood.

Encroachment of the setback to the north would be on 1202 N Lincoln St, which is also owned by the petitioner. The structure to the rear/east is currently a gabled two story student rental property, and the addition of a second story to 1200 N Lincoln would not cause any harm or alter the current scape for the neighboring property.

It is for these reasons that we believe the variance would only improve the condition of not only the property itself but also the neighborhood.

Sincerely,

David Parsch



Proposal for Second Story Addition and Home Expansion

Project Overview

This proposal outlines the addition of a second story to an existing single -story home, expanding the living space and increasing the number of bedrooms and bathrooms to five each. The project aims to achieve this while maintaining the home's existing footprint, using similar exterior materials, and ensuring the design remains consistent with the architectural style of the surrounding neighborhood.

Project Goals

- **Expand Living Space:** Add a second story to the home to significantly increase the square footage of living space.
- Increase Bedrooms and Bathrooms: Convert the home into a 5 bedroom, 5-bathroom residence to accommodate a larger family or guests.
- **Maintain Existing Footprint:** Preserve the home's current foundation and footprint to minimize disruption to the property and surrounding landscape.
- Use Like Materials: Utilize exterior materials that are similar in appearance and quality to the existing materials to ensure a cohesive and aesthetically pleasing design.
- **Neighborhood Harmony:** Design the second story addition to complement the architectural style of the neighborhood, ensuring the home blends seamlessly with its surroundings.

Design and Construction

- Architectural Design: Have engaged with an architect to design the second story addition, taking into consideration the existing home's structure, style, and the neighborhood's architectural surroundings.
- **Permits and Approvals:** Obtain all necessary permits and approvals from local authorities before commencing construction.

- **Construction:** Hire a qualified c ontractor to oversee and execute the construction of the second story addition, ensuring adherence to the design plans, building codes, and safety regulations.
- **Material Selection:** Select exterior materials that are similar in color, texture, and quality to the existing materials to maintain the home's visual appeal and consistency with the neighborhood.

Conclusion

This proposal outlines our plan for adding a second story to an existing home and converting it into a 5-bedroom, 5-bathroom residence. The project prioritizes maintaining the home's existing footprint, using similar exterior materials, and ensuring the design complements the neighborhood's architectural style. By following this plan, the homeowner can achieve a significant expansion of living space while preserving the home's character and value.

The proposed materials for adding a second story to the house at 1200 N Lincoln St include:

- **Structural framing:**Treated lumber wood beams and joists for the floor system and roof framing.
- **Exterior walls:** Standard OSB sheathing and tyvec wrapping. Fiber cement or hardboard siding for exterior cladding, providing durability and low maintenance. 12" Hardboard siding is the existing material.
- **Roofing:** Asphalt shingles for water resistance and durability. Would maintain color of current asphalt shingles.
- **Windows and doors:** Energy-efficient double-paned windows for natural light and ventilation. Matching to existing double hung double paned windows.
- **Insulation:** Closed-cell spray foam insulation for the walls and roof, providing superior insulation and air sealing.
- **Interior finishes:** Drywall for interior walls and ceilings, providing a smooth surface for painting or wallpaper. LVP flooring for durability and easy maintenance.
- **Electrical and plumbing:** Insulated copper wiring and PEX piping for electrical and plumbing systems, respectively, ensuring longevity and reliability.

























PETITIONER:	CRMR 3, LLC (Royal on the Eastside) 3115 S. Highway 37, Bloomington, IN
CONSULTANTS:	Bynum Fanyo & Associates, Inc. 528 N. Walnut Street, Bloomington, IN

REQUEST: Variance from landscaping standards and front, side, and rear parking setback standards to allow for a 2,403 square foot addition for a "vehicle sales or rental" use in the Mixed-Use Corridor (MC) zoning district.

REPORT: This 2.7 acre property is located at 3333 E. 3rd Street and is zoned Mixed-Use Corridor (MC). Surrounding land uses include several commercial and retail buildings to the north, west, and south with single family residences in the Park Ridge neighborhood to the east. There are no known regulated environmental features on this property. Adjacent properties to the north, west, and south are zoned Mixed-Use Corridor (MC) and the properties to the east are zoned Residential Medium Lot (R2). Since the properties to the east of this site are zoned Residential Medium Lot (R2), a Type 2 bufferyard is required along the entire east property line.

The property has been developed with a "vehicle sales or rental" use and is operated by Royal on the Eastside automobile dealership. The petitioner is proposing a 2,030 square foot addition to the west side of the building for an expanded showroom and a 373 square foot addition to the northeast corner of the building for a new entry door into the service bay. A building permit was approved in 2015 (CZC-C15-164) to allow a 1,500 square foot addition on the east side of the building. At the time of the addition in 2015 the building had a gross floor area of 15,155 square feet and that addition was less than 10% of the building. The addition in 2015, in combination with the currently proposed addition, equals a 26% expansion of the building. Since the proposed addition to the building in combination with a previous addition expands the gross floor area by more than 10%, this proposal requires the site to come into compliance with the Limited Compliance standards of Section 20.06.090(f)(2)(B). This includes new landscaping throughout the property, installation of islands within the parking areas, removal of excess asphalt over the allowable minimum landscape area, installation of bike racks, and pedestrian facilities with street trees along the property frontage.

The proposed site plan shows 20 customer parking spaces (including 2 ADA accessible parking spaces) for customers and 212 spaces for vehicle display. The petitioner is proposing to install several new islands within the parking area as well as rain gardens to meet stormwater quality requirements, restripe the parking and display areas to meet current standards for minimum aisle width, create a 4' wide setback along the west property line with landscaping, install a new bike parking area along the front, and install landscaping throughout the property and along the required bufferyard to the east. However, within the required bufferyard to the east there are still several gaps that could have additional landscaping planted, a condition of approval has been included to require additional plantings in that area. New street trees would be installed as well and have been shown.

The use "vehicle sales or rental" is a unique land use in that the display of merchandise (vehicles) for sale occurs almost exclusively outside of a building. For this use, the areas where vehicles for sale are parked are not counted as parking spaces towards the maximum number of spaces allowed, however those areas are subject to all other standards that regulate parking including landscaping requirements and setbacks. Due to the location of existing parking spaces and display areas that are located between the building and the street, the petitioner is requesting a variance from parking setback standards to allow the existing parking and display areas that are located within the required front parking setback area to remain. The petitioner is also requesting a side yard parking setback variance to allow the display areas along the west and north sides of the property to not meet the required 8' side and rear yard parking setback standards. Also requested is a variance from landscaping standards to not require a landscape bumpout, island, or endcap per every 10 parking spaces and for some of the islands to not have tall, canopy trees.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE 20.06.080(b)(3)(E) Standards for Granting Variances from Development Standards:

A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDING:

Landscaping (number of islands): The granting of the variance to not require an island for every 10 parking spaces will not be injurious to the public health, safety, morals, or general welfare of the community. The proposed site plan shows the installation of islands and endcaps to an extent that is reasonable to balance maintaining areas for displaying of merchandise for sale and defining drive aisles, while also getting closer to compliance.

Landscaping (tall canopy trees): The granting of the variance to not require tall canopy trees in every island would be injurious to the public health, safety, morals, or general welfare of the community as the installation of tall, canopy trees within the parking areas has been proven to provide demonstrated benefits in reducing the heat island effect that results from large areas of exposed asphalt. The benefits from having large canopy trees within the parking areas would be very beneficial to the public health and welfare of the community.

Parking Setback (front): The granting of the approval to allow the existing parking spaces to remain between the building and street is not expected to be injurious. There are a very limited number of spaces that are currently within the front parking setback and there are no known negative impacts from the parking spaces in the current location. Some parking spaces within the front will be removed for new islands and landscaping thus reducing the amount of parking between the building and the street.

Parking Setback (side): The granting of the approval to allow a reduced side yard setback to

the west is not expected to be injurious. This portion of the site is adjacent to a parking area on the adjacent property as well. The granting of the variance would result in removal of some asphalt to create a 4' setback and allow the installation of new landscaping where none currently exists.

Parking Setback (rear): The granting of the approval to allow the current zero foot rear yard setback to the north is not expected to be injurious. This portion of the site is directly adjacent to another parking area on the adjacent property and therefore is not expected to be injurious.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING:

Landscaping (number of islands): No adverse impacts to the use and value of surrounding properties as a result of the requested variance to have a reduced number of interior islands are found. As mentioned previously, the proposed site plan shows the installation of islands and endcaps to an extent that is reasonable to balance maintaining areas for displaying of merchandise for sale and defining drive aisles, while also getting closer to compliance.

Landscaping (tall canopy trees): No direct adverse impacts to the use and value of surrounding properties as a result of variance to not have tall canopy trees within the islands are found. However, as noted above the lack of tall canopy trees within the islands can have an adverse impact on the overall community.

Parking Setback (front): No adverse impacts to the use and value of the area adjacent to the property are found. There are a very limited number of spaces that are currently within the front parking setback and there are no known negative impacts from the spaces in the current location. Some parking spaces within the front will be removed for new islands and landscaping thus reducing the amount of parking between the building and the street.

Parking Setback (side): No adverse impacts to the use and value of the area adjacent to the property are found from the granting of the variance to allow a 4' setback to the west rather than the required 8' setback. There is currently no setback or landscaping between this property and the property to the west and the granting of this variance would allow a reduced setback and landscaping to be established where there currently is none.

Parking (rear): No adverse impacts to the use and value of the area adjacent to the property are found from the granting of the variance to allow the existing zero foot setback to remain. This portion of the site is directly adjacent to another parking area on the adjacent property and therefore is not expected to be injurious. The overall proposed site plan shows the installation of islands, endcaps, restriping, and landscaping to an extent that is reasonable to balance maintaining areas for displaying of merchandise for sale, while also bringing the site closer to compliance.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING:

Landscaping (number of islands): The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property in that requiring all of the required islands would create a practical difficulty in the use of this property since this specific use relies on outdoor display area for their vehicles. The practical difficulties are peculiar to the property in question in that this use relies exclusively on the outdoor display area for display of cars for sale and requiring all of the islands to be installed would substantially reduce the amount of area available for vehicle display and create a hardship for this existing use and property. The granting of the variance will relieve these difficulties and allow a property to come closer to compliance while still allowing islands to be installed within the site.

Landscaping (tall canopy trees): The strict application of the terms of the Unified Development Ordinance will not result in practical difficulties in the use of the property. Requiring tall canopy trees will not prevent this property from continuing to be used in the current manner. Other similar "auto and vehicle sales" uses have installed tall canopy trees within interior islands with no demonstrated practical difficulties. There are no practical difficulties that are peculiar to the property in question that prevent tall canopy trees from being installed in the islands as required.

Parking Setback (front): The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property in that compliance with this standard would require a significant amount of parking and display area to be removed and present a hardship in limiting the amount of area available for the display of vehicles for sale. The practical difficulties are peculiar to the property in question in that the location of existing parking, display areas, and existing building do not allow for the removal of spaces without substantially affecting the ability of the use to continue at this location. The granting of the variance will relieve these difficulties and allow the site to be brought closer to compliance with other UDO development standards.

Parking Setback (side): The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property in that requiring the full 8' setback would require an entire row of parking/display spaces to be removed and remove almost 20% of the parking for vehicle display space available for this use. The practical difficulties are peculiar to the property in question in that the location of existing parking and display area do not allow for the removal of spaces without significantly affecting the ability of the use to continue at this location. The granting of the variance will
relieve these difficulties and allow the site to be brought closer to compliance with other UDO development standards.

Parking (rear): The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property in that requiring the full 8' setback along the north property line would require an entire row of parking/display spaces to be removed and remove 20 spaces available for use. The practical difficulties are peculiar to the property in question in that the location of existing parking and display area do not allow for the removal of spaces to meet the required setbacks without significantly affecting the ability of the use to continue at this location. The granting of the variance will relieve these difficulties and allow the site to be brought closer to compliance with other UDO development standards.

RECOMMENDATION: The Department recommends that the Board of Zoning Appeals adopt the proposed findings and deny the tall canopy tree portion of the variance and approve the remainder of V-04-25 with the following conditions:

- 1. These variances are for this addition only, any future development must meet all UDO requirements.
- 2. All trees within islands and endcaps shown must be a tall, canopy tree species.
- 3. Additional landscaping is required within the bufferyard along the east property line to the extent practical, to be determined in conjunction with Planning & Transportation staff.
- 4. No variance from entrance and drive standards is approved, all entrances must meet UDO requirements.
- 5. Petitioner will continue to work with staff on incorporating small/medium trees along the west property line.
- 6. Site plan approval is required prior to issuance of any permits.

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Bloomington Board of Zoning Appeals

Petitioner's Statement Royal on the Eastside 3333 East Third Street

Overview-Existing site

The site as it exists is 2.95 acres containing a multi brand car dealership that has been on site at this location in one form of dealership since 1969. The existing structure is a partial two-story structure of around 16,655 square feet, and the proposed addition will add 2,464 additional square feet. Currently, the structure contains three worldwide car brands in Volkswagen, Audi, and Subaru. The Zoning is MC (Mixed use Corridor), and the use is identified as a "nonconforming legal use", therefore any expansion of business growth requires the owner to seek a variance under the Limited Compliance Rules.

Location

The location of this site and the changes around it are the reasons for this request. This site is along a busy, main east-west corridor, and is landlocked by other commercial uses to the north and west. The dealership needs to expand its showroom to meet branding requirements, or risk losing the brand.

Architectural Character

This roughly 2,000 square foot, single story showroom addition will match the modern style architecture of the existing building in materials, windows, and height.

History

The Royal Auto Group was founded by Charles Royal Jr when he purchased his first dealership in Bloomington, Indiana, in 1969.

Born in 1932, Charles Royal Jr. grew up in El Paso, Texas. His father was an entrepreneur who owned several businesses, including a hotel and a small used car lot. When Mr. Royal finished attending high school, he began working full-time at his father's used car lot. He did this for several years until he hired on at a local new car dealership, and it was there he found his passion for selling cars. He loved it and was a natural salesman. Hard working, easy to talk to, and a savvy negotiator, Mr. Royal quickly rose up the ranks of the dealership sales department. Over the next years, he climbed up the ranks of multiple dealership organizations in the Southwest. He landed at Lone Star Chevrolet in El Paso, where he became top salesman, and then top Sales Manager. When the owner of Lone Star died, his widow sold the dealership to one of the largest auto group owners in the West--Mitch McClure of The Courtesy Auto Group. Mitch installed his son, Charles McClure, as the Dealer Principal of the dealership, and appointed Mr. Royal as his General Manager and right hand, a role that Mr. Royal would perform essentially until leaving to strike out on his own in 1968.

In 1969, Mr. Royal left Courtesy Chevrolet to become a partner in a single-point Chevrolet Dealership in Bloomington, Indiana. The sale was completed in 1969 and four years later, he paid off his business

partners and was the sole owner of Royal Chevrolet! Mr. Royal grew the Chevrolet dealership into the most successful dealership in town. With his roots established, he looked to expand his dealership operation. His first partner was a former Chevrolet executive, Bob Poynter--who was installed at their Bob Poynter Chevrolet dealership in Seymour, Indiana. Then came Bloomington Ford--and partner Tom Martin. Over the years, Mr. Royal expanded the Royal Group to include many dealerships around Southern Indiana and Kentucky, growing to as many as 13 dealerships representing 21 new car brands.

Mr. Royal bought Juan Roy Motors on East 3rd Street in May 1986. That was the start of what is now Royal on the Eastside. Starting out as a Volkswagen dealership, Subaru and Audi brands were added to the location, followed by Lincoln/Mercury, and finally Nissan. For many years, there were six new car franchise brands all under one roof at the 3333 E 3rd Street location, which was perhaps the most brands under a single roof in the entire Midwest. Mr. Royal owned and operated this dealership from 1986 until his death in July 2022. Upon his death, his family appointed his grandson and business partner, Andrew Long, to continue operating the dealership. Andrew had worked at Royal on the Eastside since high school, in the summers, and joined full-time in 2006. Andrew lives in Bloomington and continues to operate Royal on the Eastside.

Over the years, Royal and his family have seen the E. 3rd Street corridor change. Many of the local "mom and pop" shops have been replaced by large box stores or regional and national chains. Large apartment complexes have replaced many smaller retail businesses over the last few years. In the face of this change, Royal on the Eastside is proud to continue the tradition of its founder, Charles Royal Jr, and operate as a locally owned and locally operated business. Royal on the Eastside isn't a big box store or chain retailer, but a truly local business.

Current UDO implications

The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relief the practical difficulties.

Proposed Finding: The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property.

The Petitioner is under intense pressure from one of its distributors, Subaru, to make certain facility improvements as set forth in the application. Until this application is approved, the Petitioner has, is, and will lose significant incentive monies. Subaru, like other automotive manufacturers and distributors have reduced gross profit margins over the last several years and substituted in lieu thereof certain incentive programs requiring operational changes in activities and facility improvements in order to earn incentive monies. With Subara substantially reducing gross profit margins, earning incentive monies are now necessary to achieve profitability. Petitioner's grandfathered incentive entitlements ended March 31,2023, and reinstitution thereof is contingent upon providing the facilities requested in the petition. Those incentive monies are used to offset overhead, pay salaries, make capital improvements, maintain facilities, etc.

The property is land-locked and cannot otherwise accommodate the required changes without approval of the petition and construction of the modest improvements requested. The property is land-locked to the east by view screening shrubbery representing a boundary, per the ordinance, of commercial expansion; the property to the east being zoned R2-Residential Medium Lot. Of course, the property is bound to the south by third street with natural setback parking requirements, etc. To the west and north are adjacent properties, some of which were subject to a grant of variance in case V-27-23 in September 2023. The Petitioner has been leasing a part of that property, on a short-term basis, to utilize for parking purposes. With a grant of that variance and the reconfiguration of that property, Petitioner has lost the adjacent parking. Additionally, all space to the north and west is now utilized for commercial purposes. The granting of the variances will allow the distributor insisted improvements to be built, parking reconfigured, and would relieve the difficulties in utilizing the property for the Petitioner's purpose, allowing petitioner to operate as it has for the past years at the location. There is little, if any, alternative use for the property

and certainly the property would be degraded by any typical alternative uses such as a used-car lot, automobile repair and body shop, construction company office and repair facility, ambulance service and repair facility or similar uses. Strict application of the ordinance would be costly to the Petitioner, potentially leading to a loss of jobs and degradation of the tenancy on the property.

As outlined in the current Unified Development Ordinance, the following items will be met as required for limited compliance standards in 20.06.90 f.(2) I (3) (addition of more than 10% of the existing floor area.

The items that will conform are the following. I-Building setbacks and height. III-Parking IV-Paving V-ADA Accessible parking VI-Bicycle parking (To be added as shown on the site plan) VIII-Pedestrian facilities IX-Signage X-Dumpster enclosure XI-Lighting XII-Entrances and drives (East entry drive to be reduced to 34 feet in width after turning movements exhibits)

Variances being sought

II-Parking setback

Although several customer spaces are being removed along the east property line, many of the existing customer spaces are in front of the building and do not meet the 20 foot behind the primary façade rule. In addition, there are parking spaces for display vehicles along the north and west within the 8' setback.

VII-Landscaping

Required amount of buffer yard and general landscaping is not met (have some required) Required large canopy trees within the parking islands is not being met (have some required) XIII-Minimum Landscape area

Required number of parking islands every 10 spaces cannot be met Overall impervious coverage cannot be met – existing site impervious coverage = 94%, proposed plan impervious coverage = 88%, UDO impervious coverage max. for zoning = 60%

We propose that we meet the Criteria to evaluate the approval under flexibility and relief procedures with the following:

1. The approval will not be injurious to the public health, safety, morals, and general welfare of the community; and

As an existing car dealership with a sales lot, it is expected to have automobiles for the public to review, even after business hours. The addition to the building will match and complement the existing building and will be built upon existing impervious surface. As part of this variance, the client will remove some parking that falls within the setback along Third Street, remove and meet the buffer yard requirements to the east in an area at the North East corner with removal of existing paving and additional landscaping.

In addition, several lot landscaping islands are being installed where practicable, including landscaping along the west property line.

2. The use and value of the area adjacent to the property included in the development standards variance will not be affected in a substantially adverse manner; and No impacts on the neighboring properties or reduction in value will result from this variance. The largest neighboring property to the west which was vacant for a number of years is now in use and much like this project, was constructed long before the current UDO ordinance.

3. The strict application of the terms of this UDO will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the development standards variance will relieve the practical difficulties. This property has long existed well before any UDO and current applications of the new UDO strictly limit the ability of the client to continue this use that this facility was originally designed for. While the architecture of the building needs no variance, this particular site and use is difficult to bring up to current UDO standards as it would result in a dramatic reduction in the asphalt areas which are the sales area for vehicles and their display, and additional cost and maintenance for the issues that additional landscaping brings to auto dealership lots. The peculiarity for this parcel is also that this parcel was developed long before we had zoning ordinances in effect, and due to the nature of an ever-changing automobile dealership, and any growth of this business would require a variance to meet even the basic of requirements.

Our proposal Will blend into the existing architecture, increase the building footprint within existing impervious surface areas, and enable this long time Bloomington based business to continue to exist in the current location. This variance request and approval will ensure a continuation of this long-time family business as well as the jobs it has provided.

Thank you for your consideration.

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