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## FREDERICK COUNTY BOARD OF APPEALS

### NOVEMBER 16, 2023

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**TITLE:** C.E. Rensberger & Family Builder LLC.

**CASE NUMBER:** B-23-20 (B275704)

**REQUEST:** Requesting approval of a variance to reduce the required 30 ft. front Building Restriction Line (BRL) to 15 ft., in accordance with Frederick County Code<sup>1</sup> Sections 1-19-3.220 Variances, and 1-19-6.100 Design Requirements. The purpose of the variance is to allow for the construction of an accessory structure (detached garage). Approval of this application would leave a front BRL of 15 ft.

**PROJECT INFORMATION:**

ADDRESS/LOCATION: 4734 Old Middletown Rd., Jefferson Md 21755  
TAX MAP/PARCEL: Tax Map 84, Parcel 0256, Size 1.68 Acres  
ZONE: (R3) Low Density Residential  
REGION: Middletown  
WATER/SEWER: W-5/S-5  
COMP. PLAN/LAND USE: Low Density Residential

**APPLICANT/REPRESENTATIVES<sup>2</sup>:**

APPLICANT: C.E. Rensberger & Family Builders LLC.  
OWNER: Jason R Hawk and Jamie J Hawk  
ENGINEER: N/A  
ARCHITECT: N/A  
ATTORNEY: N/A

**STAFF:** Michael Paone, Zoning Planner

**RECOMMENDATION:** Based on the findings and conclusions in the staff report, Staff finds that the proposed 15 ft. variance to a 30 ft. front building restriction line in order to construct a single-family residence, complies with Section 1-19-3.220 (Variance), and Section 1-19-6.100 (Design Standards) of the Frederick County Code. Approval of this Application would result in a 15 ft. front building restriction line (BRL).

**ATTACHMENTS:**

- Attachment 1: Property Location Map
- Attachment 2: Variance Map
- Attachment 3: Variance Map Continued
- Attachment 4: Elevation Map
- Attachment 5: Aerial Map
- Attachment 6: Comprehensive Plan Map
- Attachment 7: Environmental Features Map
- Attachment 8: Zoning Map

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<sup>1</sup> Unless otherwise specified, all statutory references in this document are to the Frederick County Code.

<sup>2</sup> The term Applicant refers to both the Representative and Property Owners.

## **Background**

The property zoning is (R3) Low Density Residential and the required setbacks for this property are front – 30', side – 10', rear – 30'.

The Applicant is requesting a 15 ft. variance to a 30 ft. front building restriction line in order to construct an accessory structure (garage), in accordance with Section 1-19-3.220 Variances, and Section 1-19-6.100 Design Standards. If approved, the variance would result in a 15 ft. front building restriction line. **(Attachment 1)**

### **Sec. 1-19-3.220 General Criteria - Variance:**

- (A) The Board of Appeals may authorize a variance in height, lot area and yard regulations.

**The Applicant states that they understand this requirement. The Applicant is requesting a variance to the front Building Restriction Line (BRL), in order to construct an accessory structure. This request falls under the purview of the BOA.**

- (B) An application for a variance shall be filed with the Board of Appeals only after refusal of zoning approval or an adverse determination has been issued by the Zoning Administrator.

**The Applicant states that the County Zoning staff directed him to file with the Board of Appeals. Zoning staff met with the Applicant and stated that a variance through the BOA was the only way to obtain approval for the request they were proposing.**

- (C) The Board of Appeals shall not grant a variance unless and until a public hearing is held and all of the following criteria are met:

**The hearing is scheduled for November 16, 2023.**

- (1) First, the Board of Appeals shall find that special conditions and circumstances exist which are unique to the land or structure involved and which are not applicable to other lands or structures in the same district.

**The Applicant states that the conditions and circumstances are not the result of actions taken by the property owner. This lot is unique to the area as it is the only one situated at the bottom of the hill, bordered by wet soils, and with a very small back yard.**

- (2) Upon making this finding the Board of Appeals shall also find that the following criteria are met

- (a) That the special conditions and circumstances do not result from the actions of the applicant; and

**The Applicant states that the conditions and circumstances are not the result of actions taken by the property owner. This lot is unique to the area as it is the only one situated at the bottom of the hill, bordered by wet soils, and has a very small back yard.**

(b) The literal interpretation of the provisions of Chapter 1-19 of the Frederick County Code would result in unreasonable hardship and deprive the applicant of rights commonly enjoyed by other properties in the same district under terms of Chapter 1-19; and

**The Applicant states that literal interpretation of Chapter 1-19 deprives the family of the ability to locate this building within a reasonable and useful distance from the existing home. The only alternative is to place the garage in the back yard, which forces the loss of the use of the back yard. Others in the community have the ability to build a garage and locate it reasonably in relation to their homes (Attachment 3)**

(c) That granting the variance will not confer on the applicant any special privilege that is denied by Chapter 1-19 of the Frederick County Code to other lands or structures in the same district; and

**The Applicant states that the granting of this variance would not confer any special privilege for them. This lot is unique as it is the only one situated at the bottom of the hill, bordered by wet soils, and has a very small back yard. When created, the lot was manipulated in order to accommodate the public frontage requirement and include the well location, leaving little usable area, which is unlike the other lots in this subdivision.**

(d) That the granting of the variance will be in harmony with the general purpose and intent of Chapter 1-19 of the Frederick County Code and will not be injurious to the neighborhood or otherwise detrimental to the public welfare.

**The Applicant states that the granting of this variance is in harmony with the general purpose and intent of the Section 1-19-3.220. The granting of the variance will not be injurious to others or detrimental to the public. This variance will have no adverse impact on the surrounding community.**

(D) In granting the variance, the Board of Appeals may prescribe appropriate conditions and safeguards in conformity with Chapter 1-19 of the Frederick County Code. Violation of such conditions and safeguards, when made a part of the terms under which the variance is granted, is a violation of Chapter 1-19.

**The Applicant states that they understand this requirement and will comply with any conditions prescribed by the Board.**

(E) Under no circumstances shall the Board of Appeals grant a variance to allow a use not permissible under the terms of Chapter 1-19 of the Frederick County Code in the zone involved, or any use expressly or by implication prohibited by the terms of Chapter 1-19 in said zone.

**The Applicant states that the requested use is permitted, and not prohibited, under the terms of Chapter 1-19 of the Frederick County Code.**

(F) Except as specified in § 1-19-4.220(C), the Board of Appeals shall not grant a variance to a nonconforming structure for the portion of structure determined by the Zoning Administrator to be nonconforming.

**The Applicant states that they are not requesting the approval of a variance to a nonconforming structure.**

(G) A decision of the Board of Appeals granting a variance will be void 2 years from date of approval by the Board of Appeals unless the use is established, a building permit is issued, construction has begun, or final site development plan approval has been received in accordance with the terms of the decision. Upon written request submitted to the Zoning Administrator no later than 1 month prior to the expiration date and for good cause shown by the applicant, a 1-time extension may be granted by the Zoning Administrator for a period not to exceed 6 months.

**The Applicant states that they understand this requirement and will comply.**

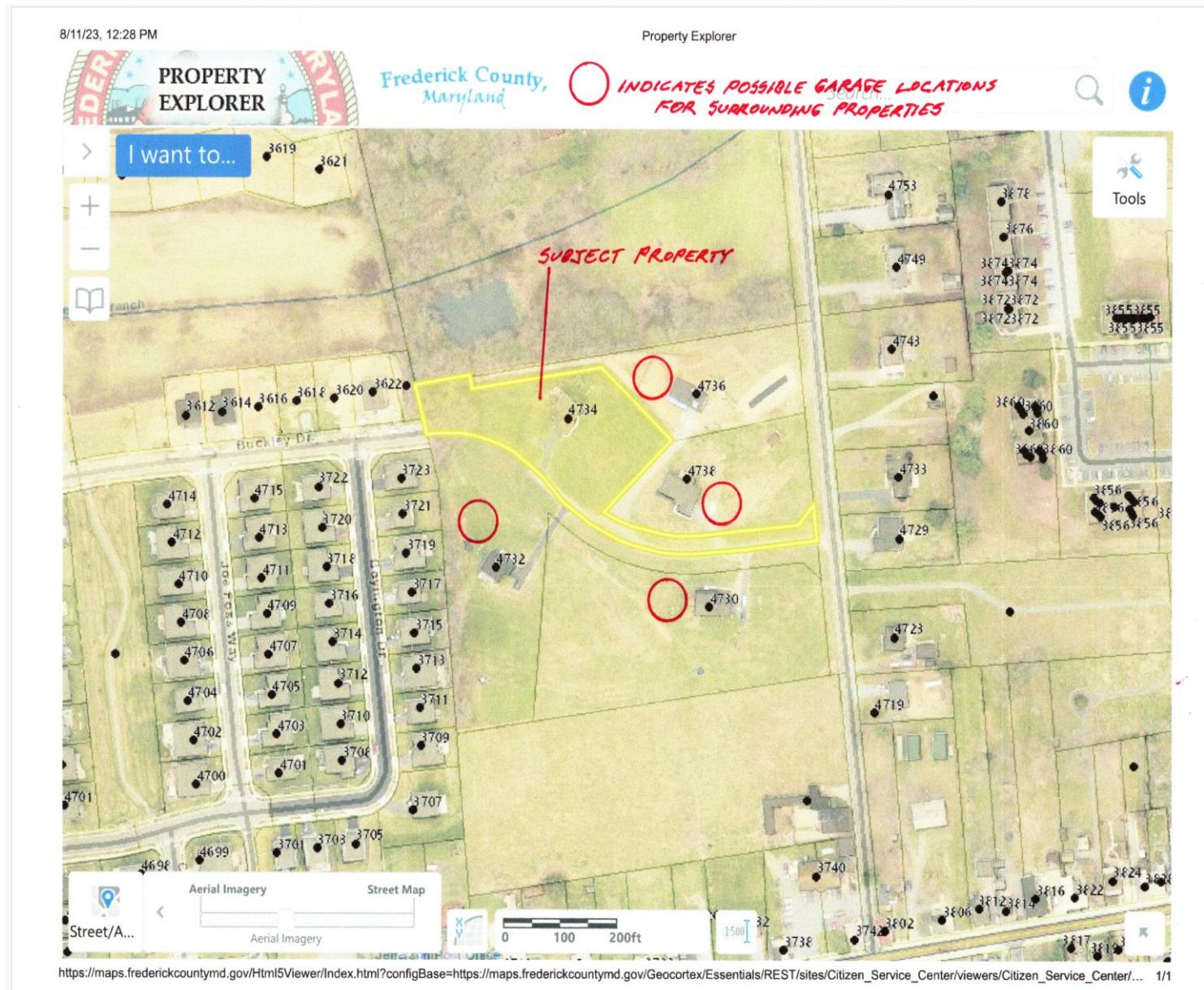
#### **RECOMMENDATION**

Based on the findings and conclusions in the staff report, Staff finds that the proposed 15 ft. variance to a 30 ft. front building restriction line in order to construct a garage, complies with Section 1-19-3.220 (Variance), and Section 1-19-6.100 (Design Standards) of the Frederick County Zoning Code. Approval of this application would result in a 15 ft. front building restriction line (BRL).

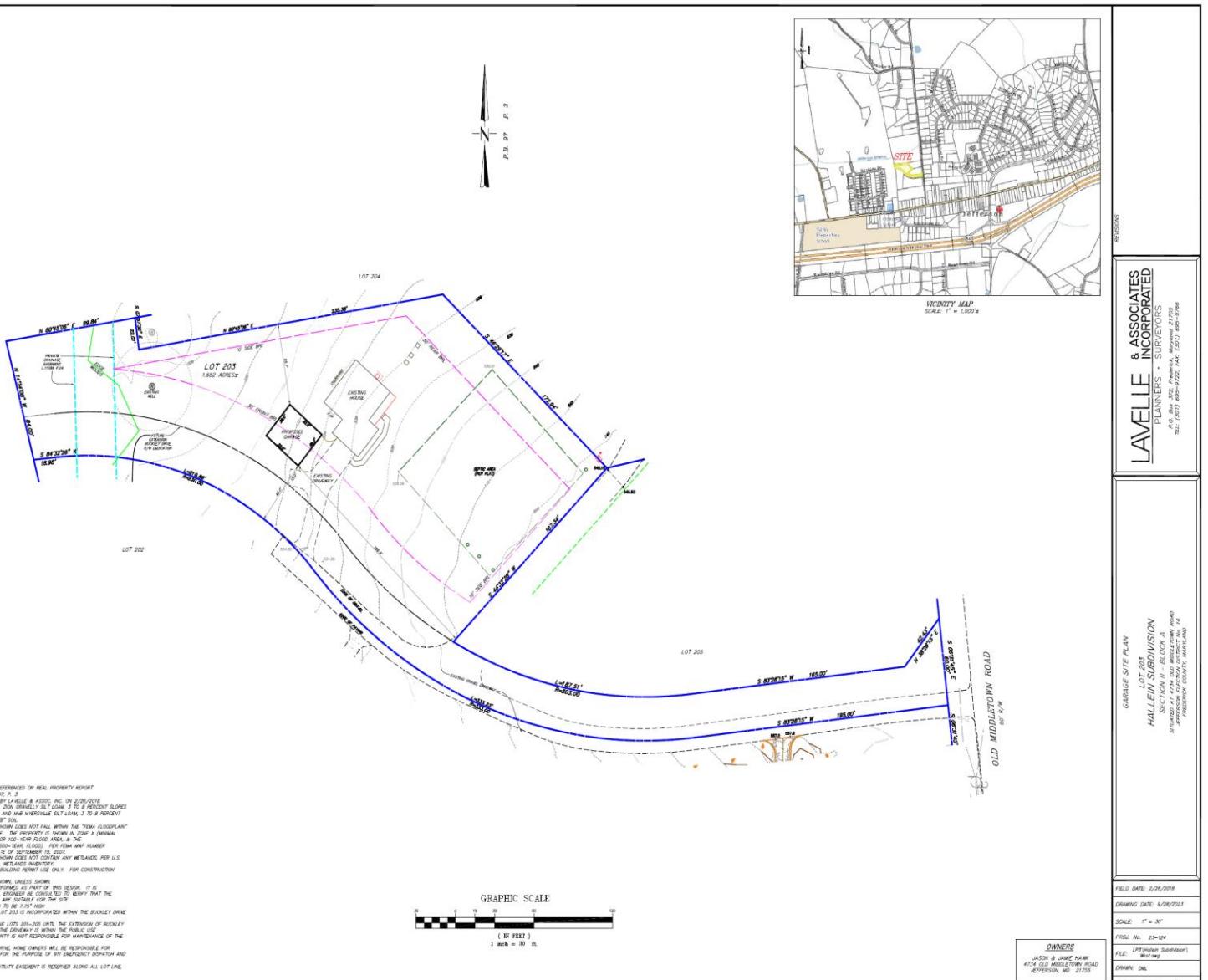
**The Board shall consider whether to grant approval of a variance in accordance with Section 1-19-3.220 and Section 1-19-6-100, of the Frederick County Code.**

**A decision of the Board of Appeals granting a variance will be void 2 years from date of approval by the Board of Appeals unless the use is established, a building permit is issued, construction has begun, or final site development plan approval has been received in accordance with the terms of the decision. Upon written request submitted to the Zoning Administrator no later than 1 month prior to the expiration date and for good cause shown by the applicant, a 1-time extension may be granted by the Zoning Administrator for a period not to exceed 6 months.**

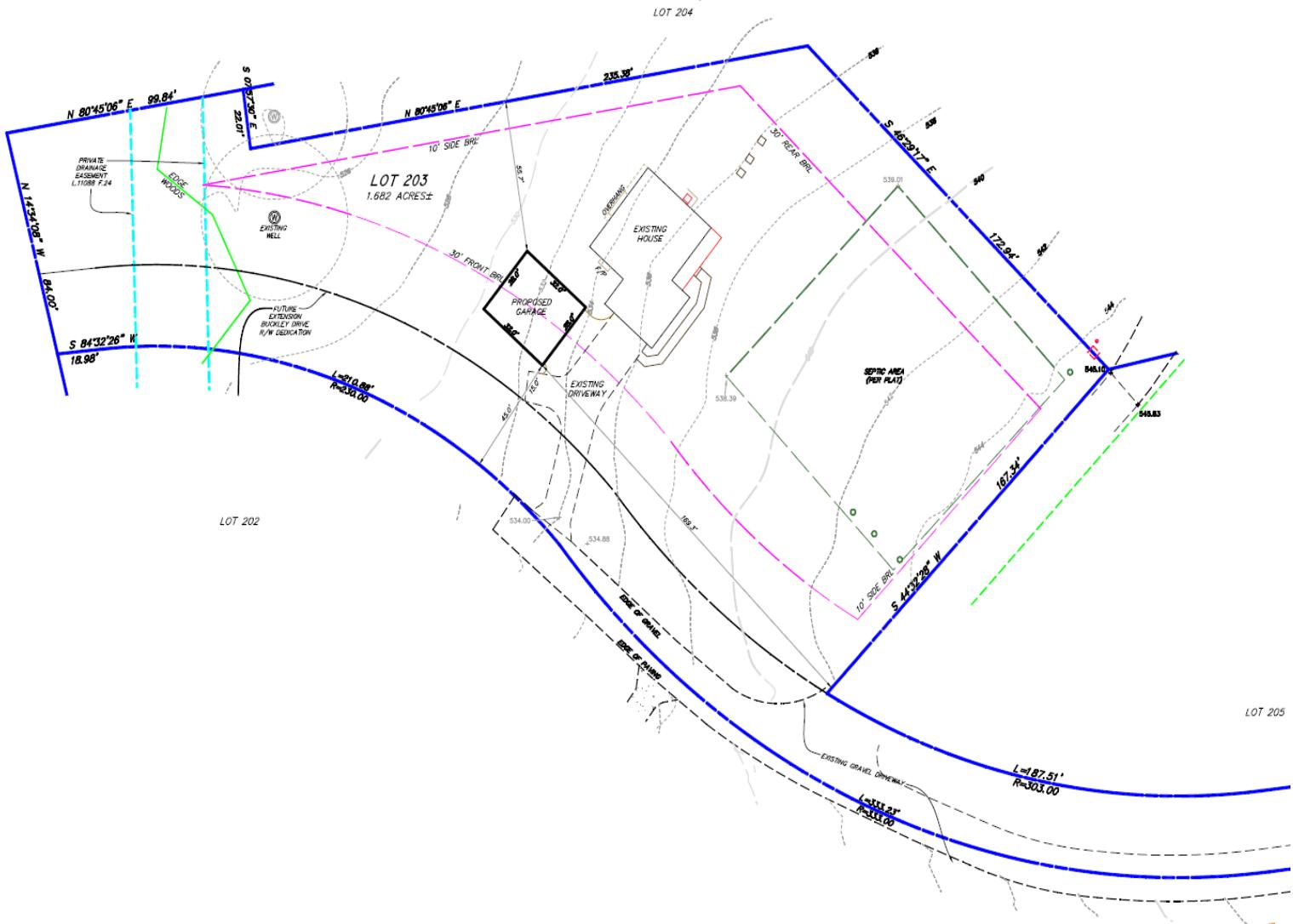
## Attachment 1: Property Location Map



## Attachment 2: Variance Maps



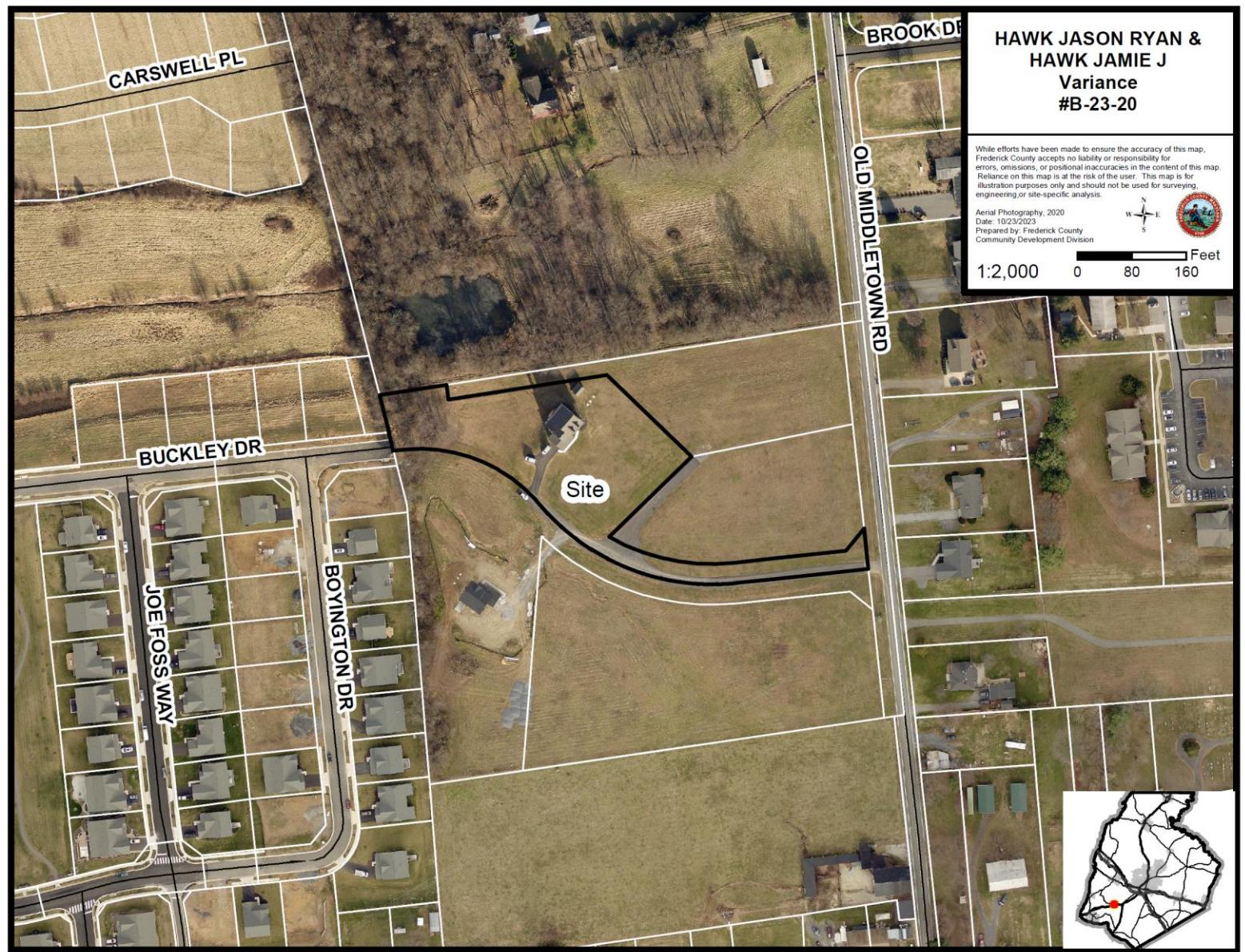
### **Attachment 3: Variance Maps Continued**



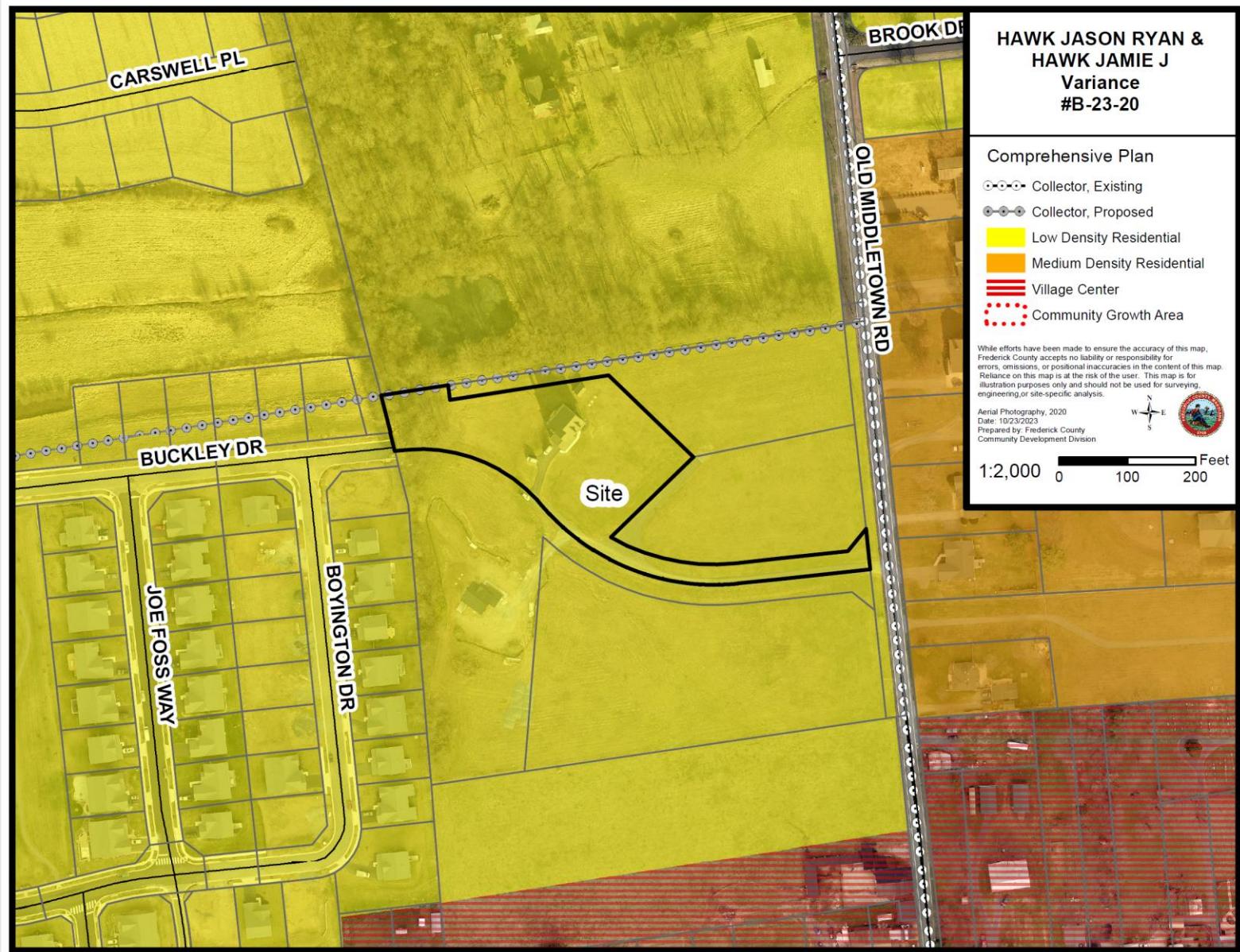
## Attachment 4: Elevation Drawings



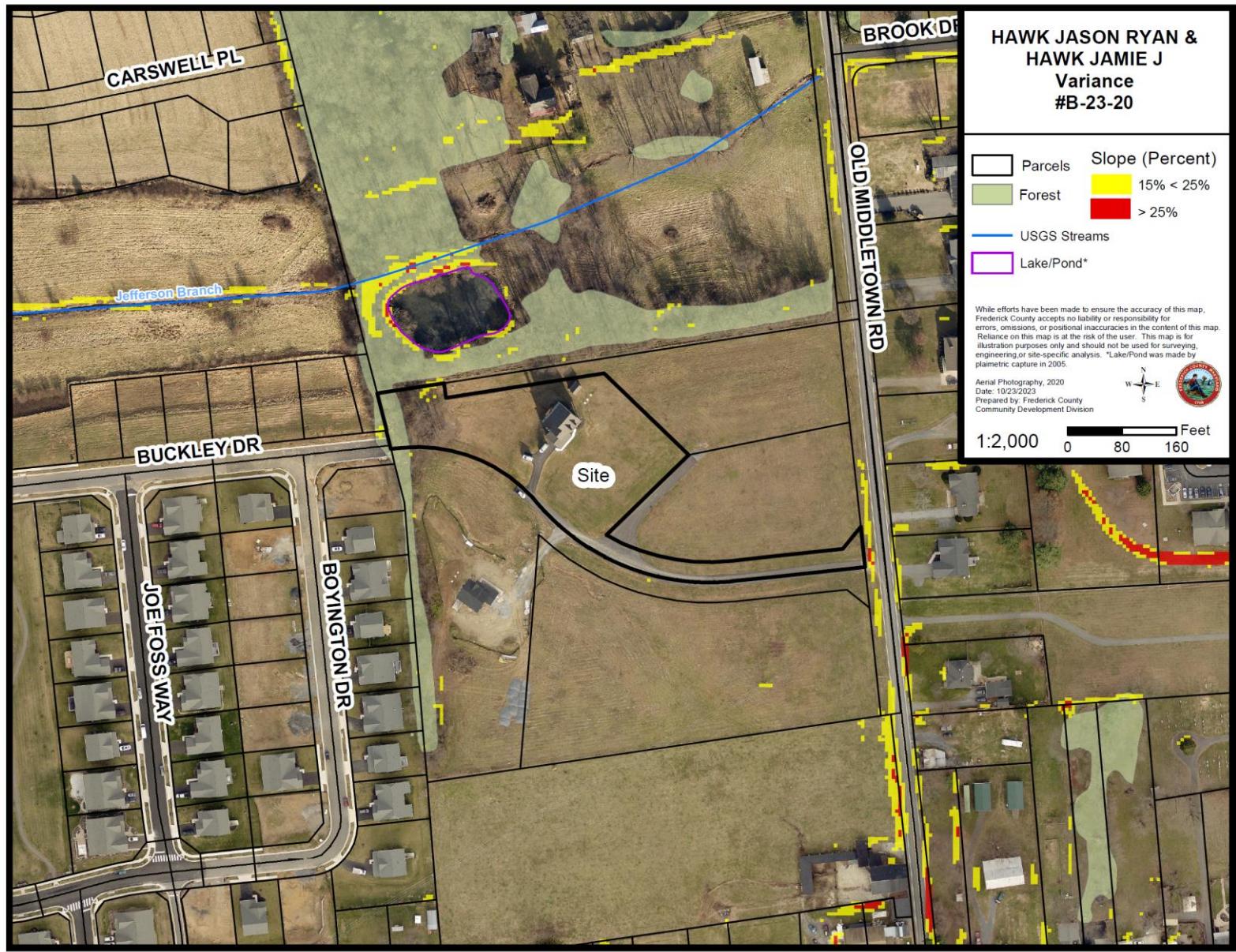
## Attachment 5: Aerial Map



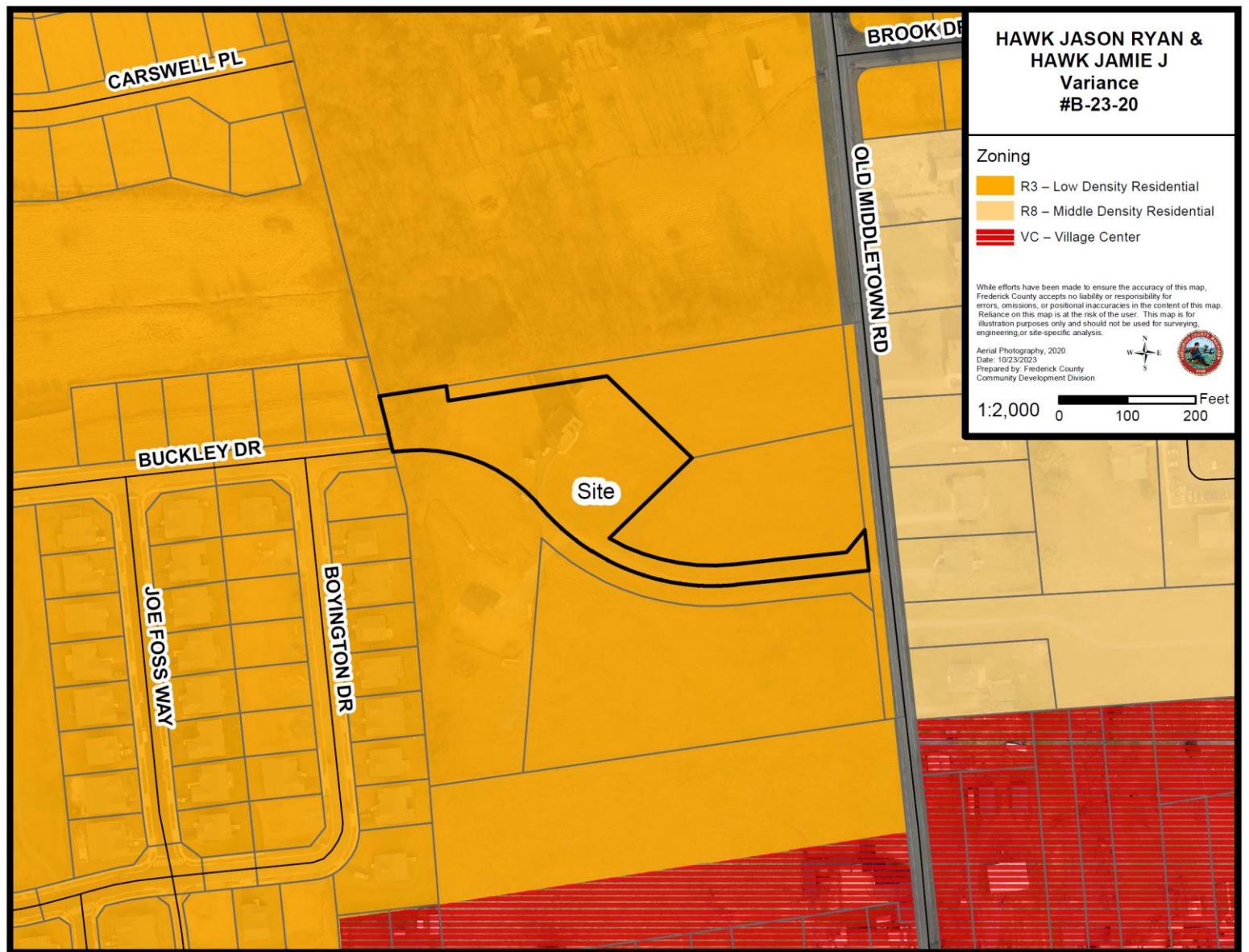
## Attachment 6: Comprehensive Plan Map



## Attachment 7: Environmental Features Map



## Attachment 8: Zoning Map

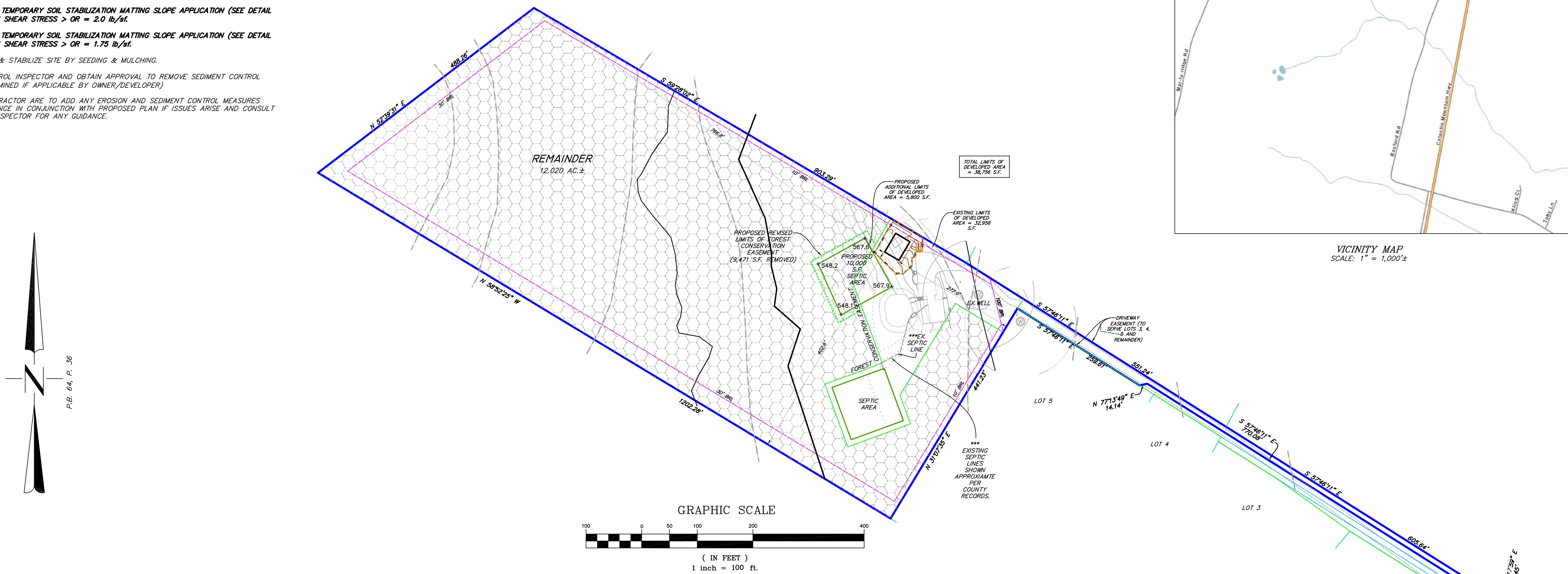


**SEQUENCE OF CONSTRUCTION:**

- 1) MISS UTILITY SHALL BE CONTACTED AT 1-800-257-7777 A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
- 2) CONTACT THE SEDIMENT CONTROL INSPECTOR AT 301-600-3507 A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION FOR A PRECONSTRUCTION MEETING.
- 3) INSTALL SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE, AND OTHER SEDIMENT CONTROLS. CONTACT E.C.S. BEFORE PROGRESSING FURTHER.
- 4) COMMENCE SITE GRADING, BUILDING CONSTRUCTION AND DRIVEWAY INSTALLATION.
- 5) INSTALL UTILITIES (WATER AND SEWER CONNECTIONS) & TEMPORARY/PERMANENT STABILIZATION.
- 6) SLOPES MUST UTILIZE TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION (SEE DETAIL B-4-6-B) WITH A DESIGN SHEAR STRESS > OR = 2.0 lb/sf.
- 7) SLOPES MUST UTILIZE TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION (SEE DETAIL B-4-6-B) WITH A DESIGN SHEAR STRESS OR = 1.75 lb/sf.
- 8) INSTALL LANDSCAPING & STABILIZE SITE BY SEEDING & MULCHING.
- 9) NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL TO REMOVE SEDIMENT CONTROL MEASURES. (TO BE DETERMINED IF APPLICABLE BY OWNER/DEVELOPER)

NOTE: OWNER AND CONTRACTOR ARE TO ADD ANY EROSION AND SEDIMENT CONTROL MEASURES NEEDED DURING DISTURBANCE IN CONJUNCTION WITH PROPOSED PLAN IF ISSUES ARISE AND CONSULT SEDIMENT AND EROSION INSPECTOR FOR ANY GUIDANCE.

**GEOTECHNICAL/STRUCTURAL ENGINEERING NOTE:**  
THE PROPOSED DESIGN HAS NOT BEEN REVIEWED OR ANALYZED BY LAVELLE & ASSOC. INC. FOR STRUCTURAL ADEQUACY FOR THIS PROJECT. THE OWNER OR DEVELOPER IS RESPONSIBLE TO EMPLOY THE SERVICES OF A GEOTECHNICAL/STRUCTURAL ENGINEER TO INVESTIGATE, TEST, AND ANALYZE THE SITE TO ENSURE IT CAN ADEQUATELY SUPPORT THE PROPOSED IMPROVEMENTS. LAVELLE & ASSOC. INC., ASSUMES NO RESPONSIBILITY OR LIABILITY FOR STRUCTURAL ADEQUACY FOR THIS PROJECT.



**HOUSE DETAILS**  
MITCHELL RESIDENCE  
PER PLAN

**HOUSE DATA**  
FIRST FLOOR ELEV. - 578.80'

**NOTES:**

1. CURRENT DEED REFERENCE: L11702, F437
2. CURRENT PLAT REFERENCE: P.B. 107, P. 9
3. EXISTING TOPOGRAPHY BASED ON FIELD SURVEY CONDUCTED BY LAVELLE & ASSOC. INC. ON 2/8/2023. TOPOGRAPHY FROM FREDERICK COUNTY PROPERTY EXPLORER HAS ALSO BEEN SHOWN.
4. LIMIT OF DISTURBANCE = 4,998 S.F.
5. THE PORTION OF THE PROPERTY SHOWN DOES NOT FALL WITHIN THE "FEMA FLOODPLAIN" PER FREDERICK COUNTY PROPERTY EXPLORER. THE PROPERTY IS SHOWN IN ZONE X (MINIMAL FLOOD HAZARD OUTSIDE THE SFHA, OR 100-YEAR FLOOD AREA, & THE 0.2-PERCENT-ANNUAL-CHANCE, OR 500-YEAR, FLOOD). PER FEMA MAP NUMBER 24021C0140D, WITH AN EFFECTIVE DATE OF SEPTEMBER 19, 2007.
6. THE PORTION OF THE PROPERTY SHOWN DOES NOT CONTAIN ANY WETLANDS, PER U.S. FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY.
7. BUILDING DIMENSIONS SHOWN FOR BUILDING PERMIT USE ONLY. FOR CONSTRUCTION REFERENCES, USE SURVEYOR'S DIMENSIONS.
8. EXISTING UTILITY LOCATION NOT KNOWN, UNLESS SHOWN.
9. NO SITE INVESTIGATIONS WERE PERFORMED AS PART OF THIS DESIGN. IT IS RECOMMENDED THAT A GEOTECHNICAL ENGINEER BE CONSULTED TO VERIFY THAT THE PROPOSED IMPROVEMENTS AS SHOWN ARE SUITABLE FOR THE SITE.
10. ALL RISERS SHOWN ARE ASSUMED TO BE 7.75" HIGH
11. A SIX (6') FOOT DRAINAGE AND UTILITY EASEMENT IS RESERVED ALONG ALL EXTERNAL LOT LINES, AND HAS NOT BEEN SHOWN.

**SITE DETAILS:**

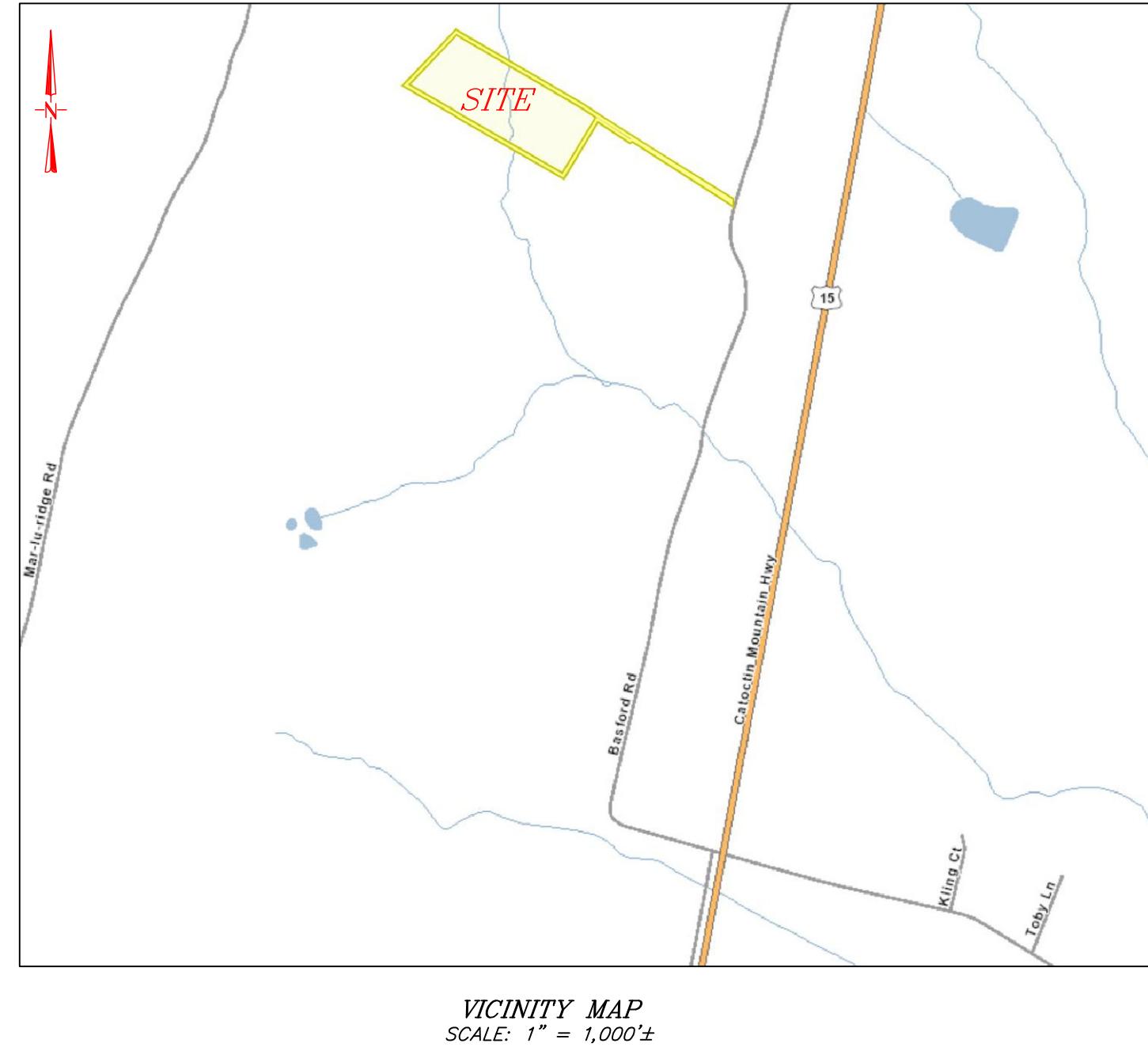
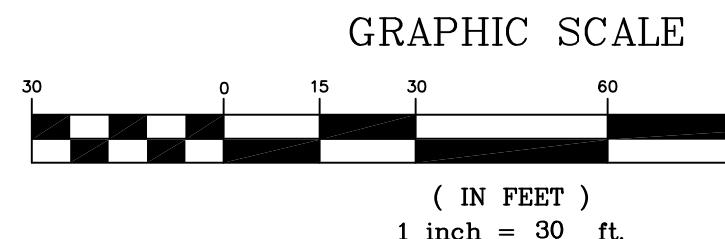
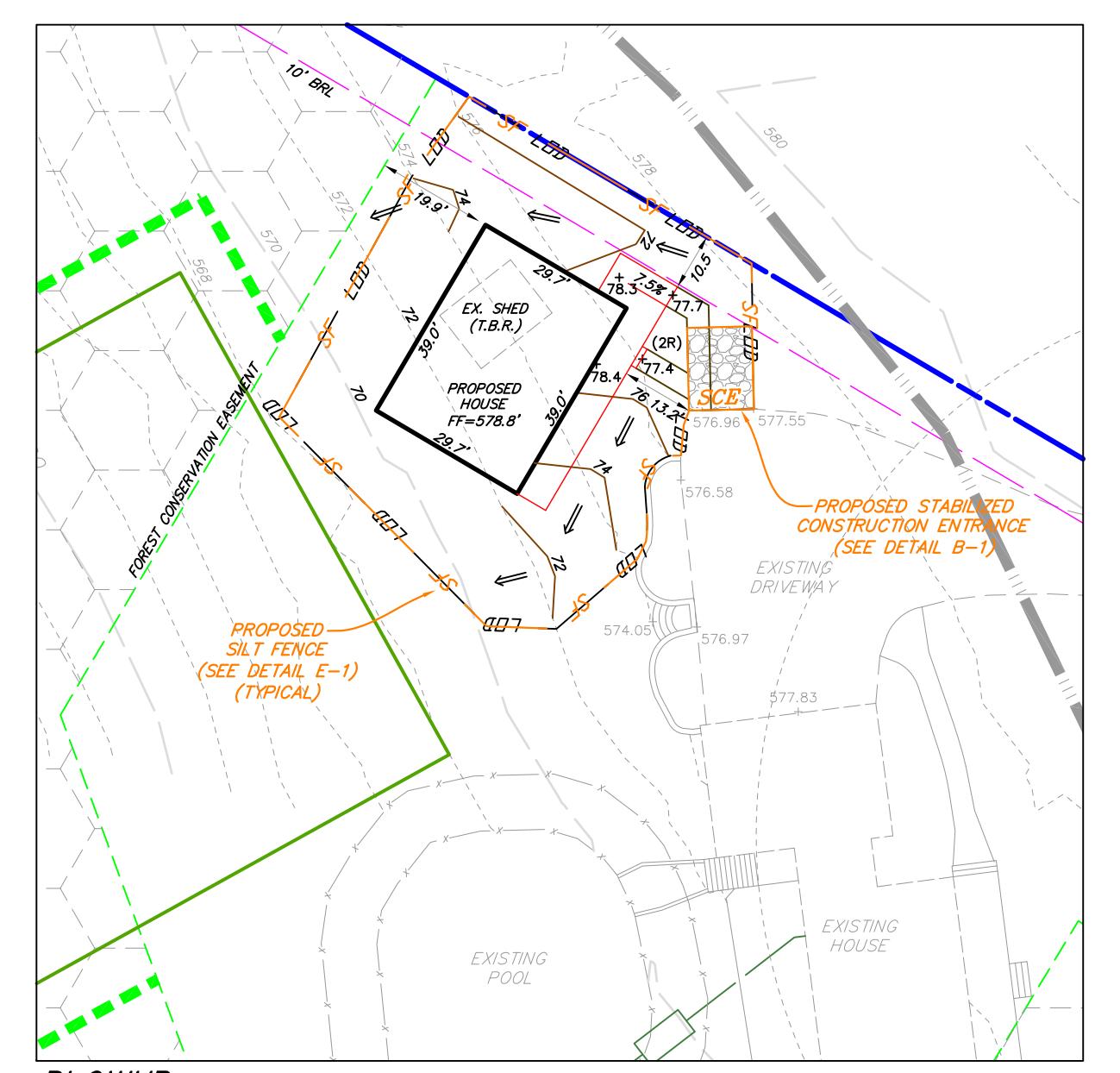
1. SITE AREA: 12.020 AC.±
2. EXISTING IMPERVIOUS AREA: 15,112 S.F.±
3. PROPOSED IMPERVIOUS AREA: 15,750 S.F.
4. LIMITS OF DISTURBANCE: 4,998 S.F.

**STORMWATER TREATMENT METHOD:**

1. STORMWATER MANAGEMENT TO BE PROVIDED USING A COMBINATION OF ROOFTOP DISCONNECT FOR THE DOWNSPOUTS & NON-ROOFTOP FOR THE PAVED SURFACES (SIDEWALK).

**STORMWATER DESIGN CRITERIA:**

1. SHEET FLOW MUST BE MAINTAINED IN AREAS RECEIVING DISCONNECTED RUNOFF, IF SLOPES ARE TOO STEEP (>5%), A SERIES OF TERRACES OR BERMS MAY BE USED TO MAINTAIN SHEETFLOW. THESE TERRACES MAY BE READILY CONSTRUCTED OF LANDSCAPING MATERIALS.
2. SHOULD AREAS RECEIVING DISCONNECTED RUNOFF BECOME COMPACTED DURING CONSTRUCTION, SCARIFYING THE SURFACE OR ROTOTILLING THE SOIL TO A DEPTH OF FOUR TO SIX INCHES SHALL BE PERFORMED TO ENSURE PERMEABILITY. ADDITIONALLY, AMENDMENTS MAY BE NEEDED FOR TIGHT, CLAYEY SOILS.



**LAVELLE & ASSOCIATES INCORPORATED**

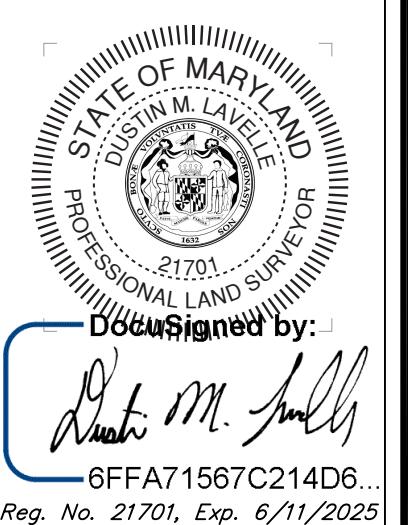
PLANNERS • SURVEYORS

P.O. Box 372, Frederick, Maryland 21705

TEL: (301) 695-9722, FAX: (301) 695-9766

**SITE PLAN**  
REMAINDER  
HADLEY WOODS

SITUATED AT 3370 BASFORD ROAD  
ELECTION DISTRICT NO. 14  
FREDERICK COUNTY, MARYLAND



Designated by:

*[Signature]*

6FFA71567C214D6,  
Reg. No. 21701, Exp. 6/11/2025

FIELD DATE: 2/8/2023

DRAWING DATE: 4/7/2023

SCALE: 1" = 100'

PROJ. No. 22-127

LP3\Hadley Woods

FILE: 3370\Remainder\wks.dwg

DRAWN: DML

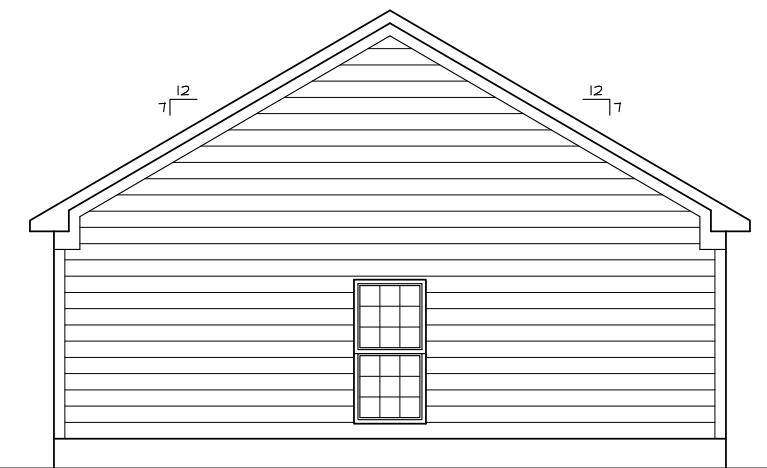
PAGE 1 OF 2





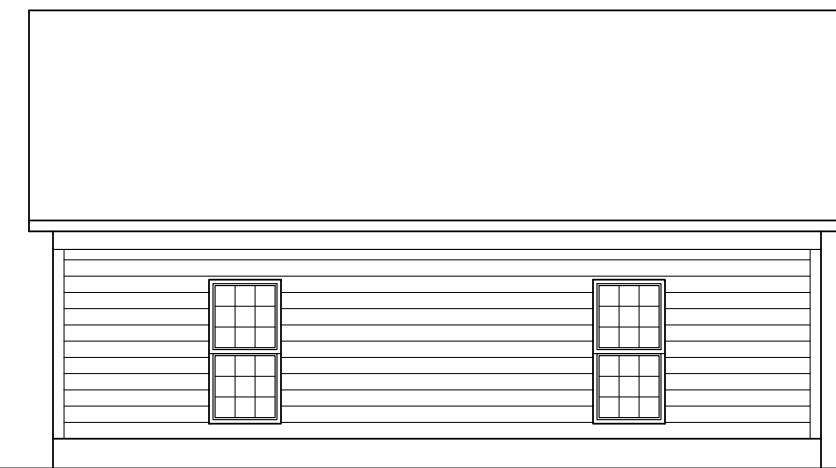
**RIGHT ELEVATION**

SCALE: 1/8" = 1'-0"



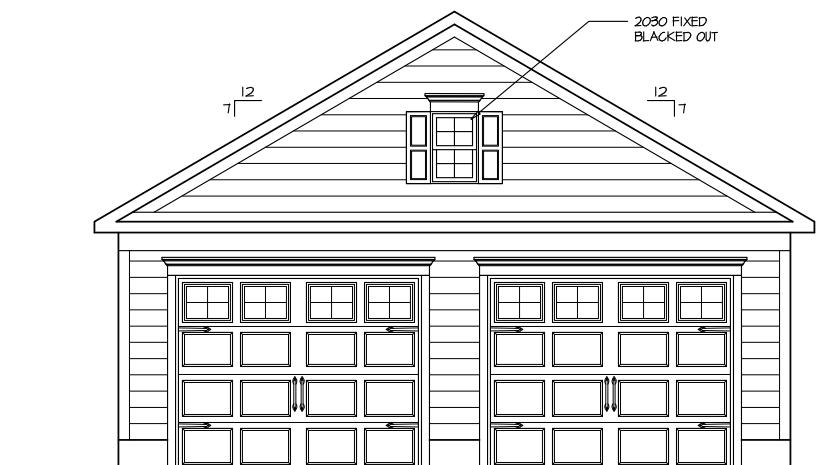
**REAR ELEVATION**

SCALE: 1/8" = 1'-0"



**LEFT ELEVATION**

SCALE: 1/8" = 1'-0"



**FRONT ELEVATION**

SCALE: 1/8" = 1'-0"

**NOTE:**

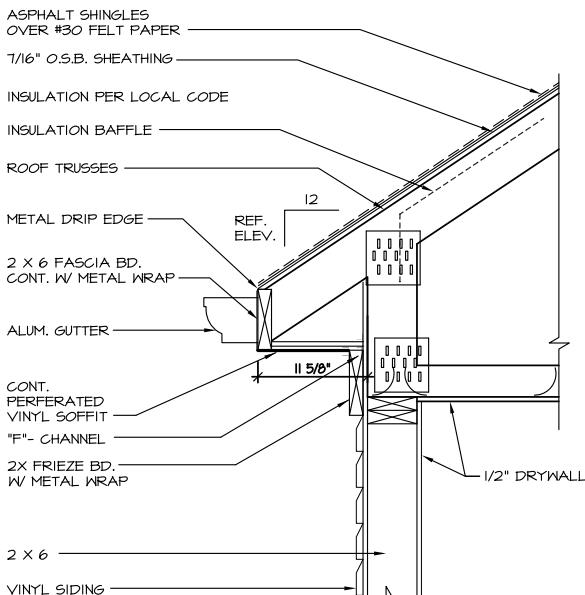
ALL TRIM, SIDING, AND  
OTHER DETAILS TO  
MATCH EXISTING HOUSE



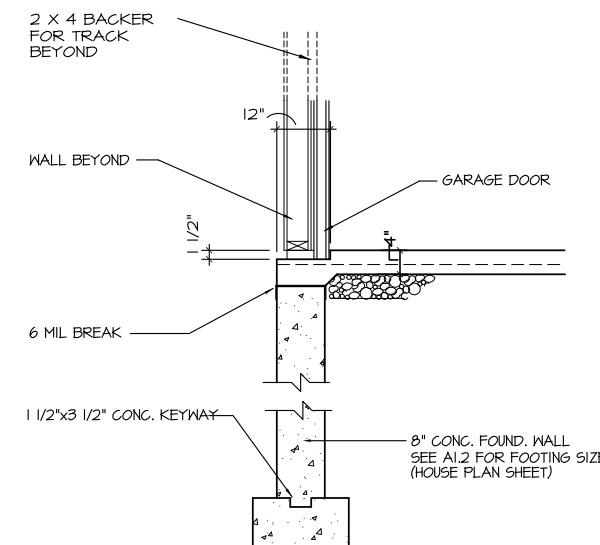
**(EXISTING HOUSE)**

HOUSE NAME: **HAWK GARAGE**  
DRAWING TITLE: **ELEVATIONS**

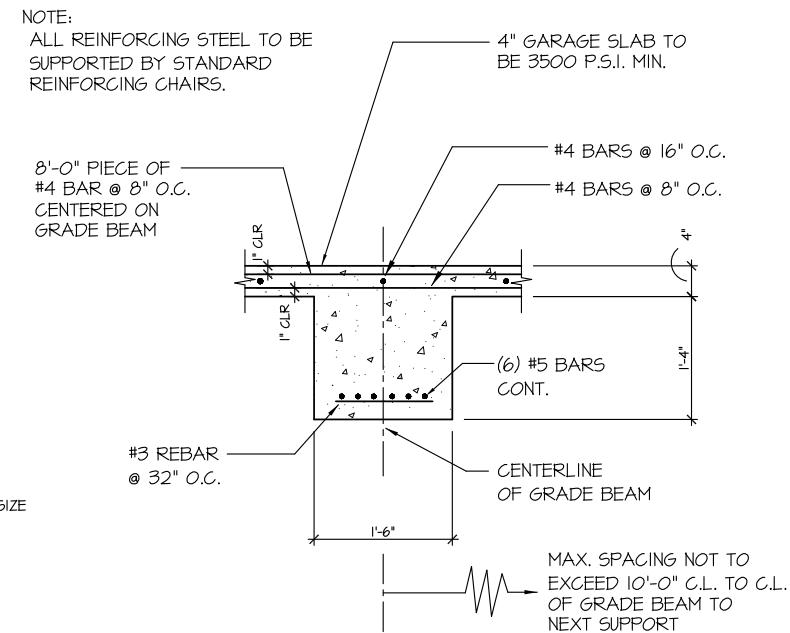
SHEET No. **A1.1**



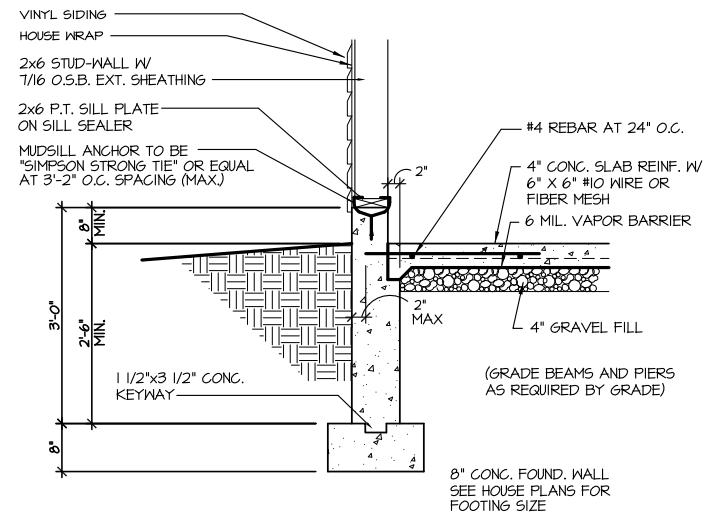
TYPICAL EAVE DETAIL



GARAGE WEATHER LIP



GARAGE FOUNDATION  
GRADE BEAM



TYPICAL FOUNDATION DETAIL

DRAWN BY:  
LBM  
DATE:  
5/4/23  
PROJECT NO.  
007135

C E R E N S B E R G E R  
A N D F A M I L Y L L C  
B U I L D E R

## FOUNDATION DESIGN SCHEDULE

MINIMUM FOUNDATION WALL THICKNESS AND REINFORCING - ACI-332-14		SOIL CLASSES AND DESIGN LATERAL SOIL (PSF PER FOOT OF DEPTH)					
MAXIMUM WALL HEIGHT (FEET)	MAXIMUM UN-BALANCED BACKFILL HEIGHT (FEET)	GW, GP, SW, AND SP (30 PSF / FT)	GM, GC, SM, SM-SC AND MIL (45 PSF / FT)	SC, ML-CL, AND INORGANIC CL (60 PSF / FT)	MINIMUM WALL THICKNESS (NOMINAL)		
8	6	8"	10"	8"	10"	8"	10"
	7	PC	PC	PC	PC	#6@36"	#6@37"
9	7	PC #6@36"	PC #6@35"	PC #6@28"	PC #6@31"	#6@32"	#6@31"
10	8	#6@35"	PC #6@33"	#6@29"	#6@28"	#6@21"	#6@28"
	9	#6@34"	PC	#6@33"	#6@22"	#6@28"	#6@16"

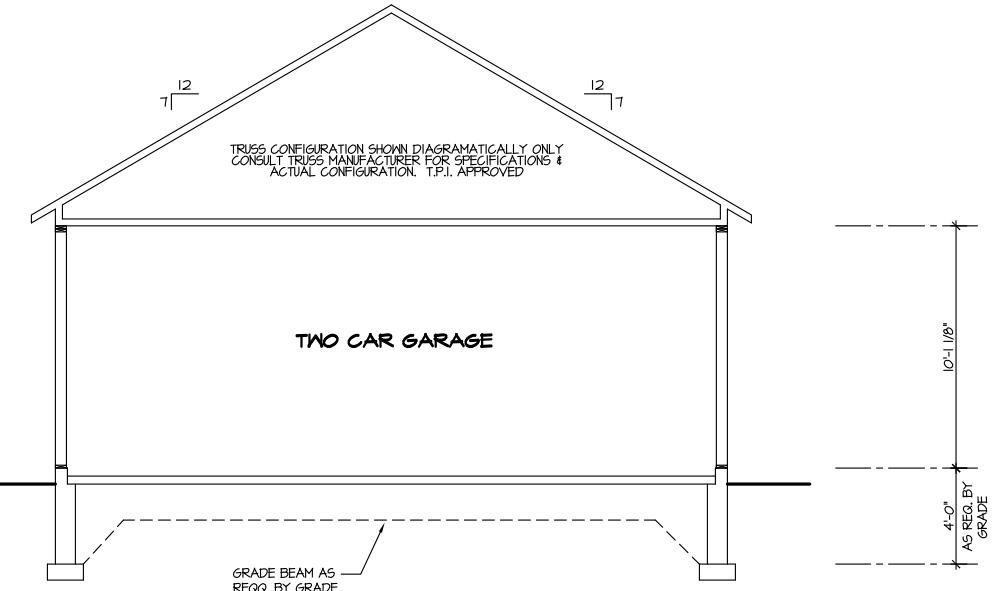
NOTE: 1. MINIMUM 10" WALL THICKNESS REQUIRED WITH BRICK VENEER  
2. PC = PLAIN IN-REINFORCED CONCRETE WALL  
3. CONCRETE SHALL BE MINIMUM 3000 PSI, AIR ENTRAINED  
4. REINFORCING TO BE MINIMUM 40 KSI PLACED 1 1/2" FROM INSIDE WALL FACE  
5. FOR CRAWL SPACE CONDITIONS 6" PC MAX HEIGHT OF 6' W/ 4' OF BACKFILL (ALL SOILS)

## PERIMETER SPREAD FOOTINGS

SUPPORTING	1500# PSF SOIL	2000# PSF SOIL	3000# PSF SOIL
1 FLOOR AND BASEMENT	19"	14"	12"
2 FLOORS AND BASEMENT	23"	17"	12"
3 FLOORS SLAB ON GRADE	15"	12"	12"
1 FLOOR AND BASEMENT W/ BRICK	22"	16"	12"
2 FLOORS AND BASEMENT W/ BRICK	29"	21"	14"
3 FLOORS SLAB ON GRADE W/ BRICK	32"	24"	16"

BASED ON 32' WIDE HOME WITH LOAD BEARING CENTER WALL THAT CARRIES HALF OF THE TRIBUTARY ATTIC AND FLOOR FRAMING. FOR EVERY 2'-0" OF ADJUSTMENT TO THE WIDTH OF THE HOME, ADD OR SUBTRACT 2" OF FOOTING WIDTH AND 1" OF FOOTING THICKNESS (BUT NOT LESS THAN 6" THICK).

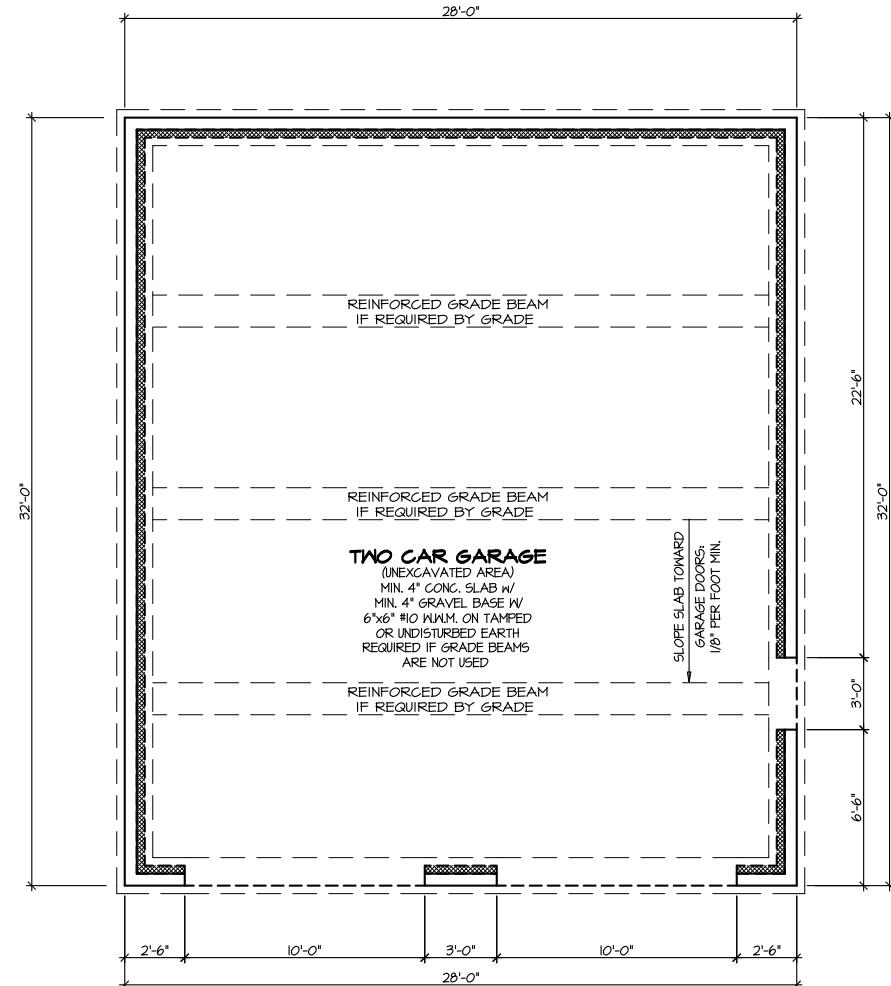
PROVIDE 2 #4 REBAR CONT. W/ #3 TIES @ 36" O.C. IF NO GEOTECHNICAL EVALUATION PERFORMED.



BUILDING SECTION

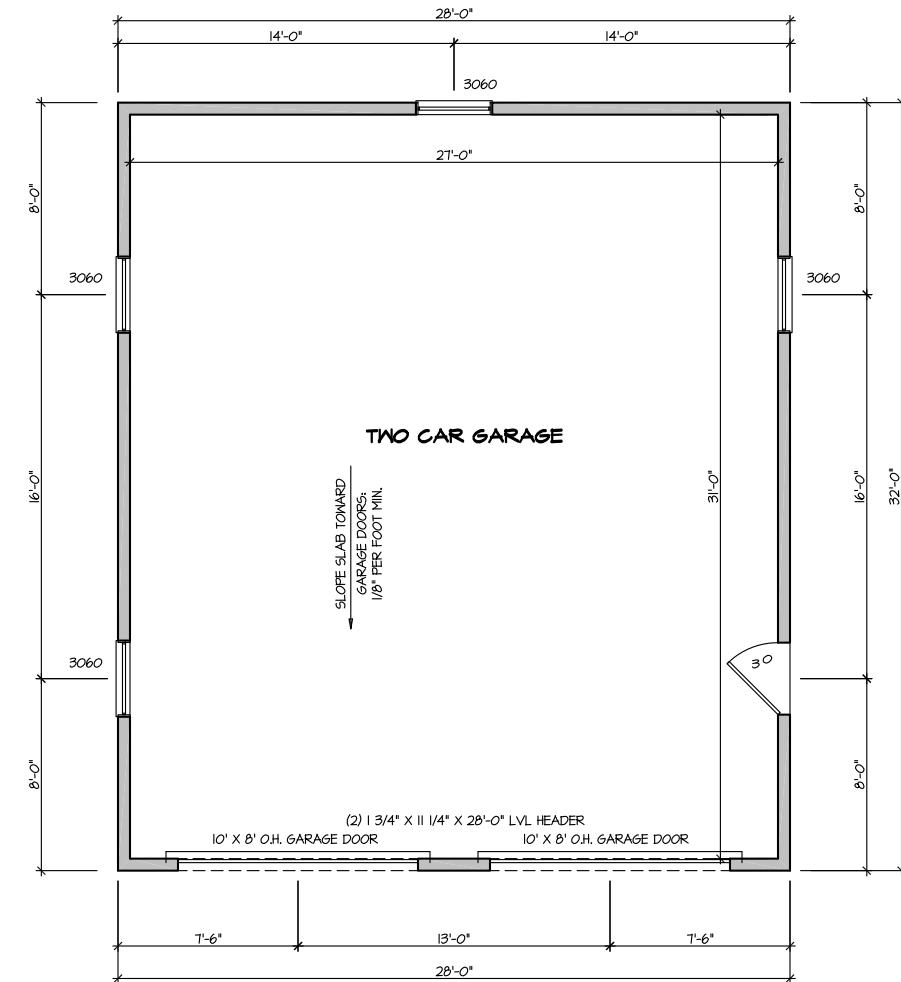
SCALE: 1/4" = 1'-0"

HOUSE NAME: HAWK GARAGE  
DRAWING TITLE: BUILDING SECTION  
SHEET No. A1.2



## 1 FOUNDATION PLAN

SCALE: 1/8" =



## FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

**NOTES:**

DIMENSIONS ARE FROM OUTSIDE  
FACE OF STUD:

EXTERIOR WALLS ARE SHOWN AS  
6" (2"x6" STUDS @ 16" O.C. PLUS 1/2"  
SHEATHING) UNLESS NOTED OTHERWISE

SIZING/SPACING OF ALL PRE-ENGINEERED WOOD FRAMING PRODUCTS (MICROLAMS, PARALLAMS, AND FLOOR/ROOF TRUSSES) TO BE ENGINEERED/VERIFY BY THE MANUFACTURER

MANUFACTURER.  
ALL WOOD FRAMING SHALL BE  
S.P.F. #2 OR BETTER.

ALL WORK TO BE DONE TO COMPLY  
WITH ALL APPLICABLE CODES.

HOUSE NAME: **HANK**  
DRAWING TITLE  
FLOOR PLAN

SHEET No.

A3.1

## GENERAL

1. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND SHALL NOTIFY THE ARCHITECT OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS. SHOP DRAWINGS MUST BE SUBMITTED TO THE OWNER BEFORE PROCEEDING WITH FABRICATION OF STAIRS, ROOF, AND FLOOR TRUSSES..

2. DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION. WHERE DRAWINGS ARE IN CONFLICT WITH OTHER DRAWINGS, SPEC'S, OR DETAILS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR CLARIFICATION. LARGER SCALE DRAWINGS AND WRITTEN SPECIFICATIONS HAVE PRECEDENCE.

3. IN THE EVENT THAT CERTAIN DETAILS OR FEATURES ARE NOT FULLY SHOWN, CONTACT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH WORK.

4. ALL PRODUCTS AND MATERIALS MUST BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURES INSTRUCTIONS. IF A CONFLICT EXISTS BETWEEN THE DRAWINGS AND THE MANUFACTURERS INSTRUCTIONS, CONTACT THE ARCHITECT FOR CLARIFICATION. THE CONTRACTOR SHALL VERIFY THAT ALL MATERIALS INSTALLED COMPLY WITH APPLICABLE CODES AND REGULATIONS.

5. PROVIDE 22 1/2" X 30" ATTIC ACCESS WITH SWITCHED LIGHT, UNLESS OTHERWISE NOTED.

6. PROVIDE HANDRAILS 34" TO 38" ABOVE NOSES ON ALL STAIRS WITH 2 OR MORE RISERS. RETURN RAILS TO WALL OR NEWEL. REQUIRED HANDRAILS SHALL BE CONTINUOUS FOR THE LENGTH OF THE STAIRS. HANDRAILS MAY BE INTERRUPTED BY A NEWEL AT A TURN. PROVIDE GUARDRAILS AT RAISED FLOORS, BALCONIES, ETC. 30" OR MORE ABOVE GRADE OR FLOOR BELOW. GUARDS SHALL BE A MINIMUM OF 36" HIGH (UNLESS NOTED OTHERWISE) AND HAVE CLOSURES SPACED TO PREVENT PASSAGE OF A 4" SPHERE. HANDRAILS SHALL HAVE A MAXIMUM 2 1/4" GRIP CROSS SECTION.

7. PROVIDE NOMINAL 2X FIRE BLOCKING AT EVERY FLOOR INTERVAL, BULKHEADS, CHASES, AND MINIMUM HEIGHT FOR WALLS OVER 9' TALL. IF OPEN WEB FLOOR TRUSSES ARE USED, PROVIDE DRAFT STOPPERS NOT TO EXCEED 500 S.F. UNLESS DWELLINGS ARE FULLY SPRINKLED.

8. PROVIDE A MINIMUM OF 6'-9" HEAD CLEARANCE FOR ALL STAIRS. STAIR RISERS SHALL NOT EXCEED 7 3/4" AND TREADS SHALL BE AT LEAST 11", UNLESS LOCAL CODES REQUIRE OTHERWISE.

9. THE CONTRACTOR SHALL SEAL ALL PENETRATIONS AND OPENINGS IN FLOORS AND WALLS TO MINIMIZE THE TRANSFER OF DRAFTS AND MOISTURE. SHEATHING PENETRATIONS SHALL BE PATCHED AND REPAIRED TO MANUFACTURERS SPECIFICATIONS.

10. SLOPE ALL CONCRETE STOOPS, PORCHES, WALKS, AND GARAGE SLABS 1/8" PER 12" TO DRAIN, OR AS NOTED ON PLANS.

II. ALL DESIGNS FOR MANUFACTURED FLOOR JOIST, RAFTERS, AND TRUSSES SHALL BE CERTIFIED BY THE MANUFACTURER. INSTALLATION OF SUCH ITEMS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURERS SHOP DRAWINGS AND RECOMMENDATIONS.

12. CHIMNEYS SHALL EXTEND A MINIMUM OF 2' ABOVE ANY ROOF STRUCTURE WITHIN 10', BUT NOT LESS THAN, 3' AT POINT OF ROOF PENETRATION.

13. FLOOR JOISTS / TRUSSES AND ROOF TRUSSES SHALL ALIGN WITH BEARING STUDS +/- 1".

14. PRIVATE GARAGES SHALL BE SEPARATED FROM ADJACENT DWELLING AND ATTIC WITH A MINIMUM 5/8" GYPSUM BOARD ON GARAGE SIDE AND 20 MINUTE SWINGING DOOR. WHEN BEHIND LIVING SPACE, INSTALL 5/8" RATED GYPSUM BOARD ON CEILING AND ALL SUPPORTING STRUCTURES.

## SITE WORK

2.1 EXCAVATION SHALL BE SUFFICIENT TO PROVIDE FULL DESIGN DIMENSIONS OR TO ALLOW FOR FORMING AS REQUIRED. NO FOOTINGS SHALL BE PLACED ON UNUSABLE MATERIAL (PROVIDING LESS THAN 1500 P.S.F. CAPACITY).

2.2 SOIL BEARING CAPACITY SHALL BE VERIFIED BY THE CONTRACTOR.

2.3 BACKFILL SHALL ONLY BE CLEAN EARTH CONTAINING NO ORGANIC MATTER, GRADED WITH POSITIVE SLOPE. FILL BENEATH STRUCTURE SHALL BE COMPAKTED TO 90% DENSITY AS PER ASTM D1557 METHOD D.

2.4 PROVIDE 4" MINIMUM CONTINUOUS DRAIN TILE AROUND PERIMETER OF BASEMENT FOUNDATION. OPTIONAL INTERIOR DRAIN TILE MAY BE INSTALLED AT THE BUILDERS DISCRETION.

2.5 PROVIDE PASSIVE UNDER SLAB RADON VENTING WHEN REQUIRED BY LOCAL CODES IN ACCORDANCE WITH APPENDIX F OF THE I.R.C. CODES. RADON VENT PIPE TO BE MIN. 3" DIA. VERTICAL AND EXTEND THRU ROOF. PIPE ELBOWS TO BE NOT LESS THAN 45 DEG.

4.5 EXTREME CARE AND PROPER MEASURES SHALL BE USED WHILE INSTALLING BACKFILL SO AS NOT TO DAMAGE, BULGE, OR TIP WALL. SHORING, BRACING, ETC., SHALL BE EMPLOYED UNTIL THE FULL DEAD LOAD OF THE BUILDING IS ON THE WALLS.

4.6 MASONRY LINTELS: PROVIDE LIGHT WEIGHT PRE-CAST LINTELS FOR ALL OPENINGS AND RECESSES IN C.M.U. WALLS. PROVIDE (1) 4 X 8 LINTEL FOR EACH 4" OF WALL THICKNESS. REINFORCE EACH LINTEL WITH 2 #4 BARS AT TOP AND BOTTOM AND WITH #2 TIES SPACED 9" O.C. UNLESS OTHERWISE NOTED. PRE-CAST LINTEL TO HAVE MINIMUM 8" BEARING AT EACH END. SUCH LINTELS SHALL NOT SUPPORT ANY SUPERIMPOSED LOADS.

4.7 USE TYPE "M" MORTAR FOR MASONRY IN CONTACT WITH EARTH.

4.8 USE TYPE "S" MORTAR FOR EXTERIOR ABOVE GRADE LOAD BEARING AND NON-LOAD BEARING WALLS, AND FOR OTHER APPLICATIONS WHERE ANOTHER TYPE IS NOT INDICATED.

4.9 MASONRY VENEER SHALL BE INSTALLED OVER A MOISTURE BARRIER OR APPROVED WATER REPELLENT SHEATHING. THROUGH-WALL FLASHING AND WEEPS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER MAY POTENTIALLY ENTER THE BUILDING ENVELOPE.

4.10 MASONRY VENEER SHALL BEAR ON MINIMUM 4" LEDGE W TIES TO BACK-UP AT 24" O.C. HORIZ. AND 16" O.C. VERT. VENEER SHOULD NOT EXCEED 30" ABOVE TOP OF FOUNDATION, EXCEPT GABLE ENDS MAY BE 38" MAXIMUM.

4.11 IF BRICK LEDGES ARE RECESSED INTO FOUNDATION WALLS THE RESULTING STEM WALL SHALL BE A MINIMUM 8" THICK FOR C.M.U. WALLS AND 6" FOR Poured IN PLACE WALLS.

4.12 PROVIDE WEEP HOLES ABOVE ALL FLASHING AT A MAXIMUM OF 33" O.C. MAINTAIN A MINIMUM OF 1" AIR SPACE BETWEEN VENEER AND SHEATHING.

4.13 ONLY IF APPLICABLE AND SHOWN ON THE DRAWINGS, FOR ATTACHED DWELLINGS, MASONRY FIREWALLS SHALL BE CONSTRUCTED OF CLASSIFICATION D-2, 8" C.M.U. IN ACCORDANCE WITH UL-1405 TO PROVIDE 2 HOUR SEPARATION FROM FOUNDATION TO UNDERSIDE OF ROOF SHEATHING.

4.14 BEAMS OR HEADERS BEARING ON MASONRY FIREWALLS SHALL HAVE A MINIMUM 4" MASONRY SEPARATION FROM ADJACENT DWELLING, AND SHALL BE FIRE CUT.

## CONCRETE

3.1 CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE STANDARDS: ACI-318-18, AND ACI-332-14.

3.2 CONCRETE FOOTINGS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 P.S.I. (UNLESS OTHERWISE NOTED).

3.3 ALL INTERIOR CONCRETE SLABS EXCEPT GARAGES SHALL HAVE A MINIMUM OF 28 DAY COMPRESSIVE STRENGTH OF 2500 P.S.I.

3.4 EXTERIOR CONCRETE AND GARAGE SLABS SHALL BE 5% TO 7% AIR ENTRAINED AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 P.S.I.

3.5 ALL CONCRETE SLABS SHALL BE MIN. 4" CONCRETE WITH EITHER 6" X 6" #10 W.W.M. OR APPROVED FIBER MESH ON 6 MIL POLYETHYLENE VAPOR BARRIER ON 4" MIN. GRAVEL BASE. SLAB INSULATION TO BE R-10 MIN. 2'-0" HORIZONTAL. LAP EDGES OF VAPOR BARRIER MIN 6". MESH EDGES SHALL OVERLAP MIN 12" TO ADJACENT PEICES.

3.6 ALL INTERIOR CONCRETE SLABS 30" OR MORE IN ANY DIMENSION SHALL HAVE CONTROL JOINTS LOCATED PER CONTROL JOINT DRAWINGS. PROVIDE 1/2" EXPANSION MATERIAL AT ALL COLD POUR JOINTS.

3.7 FOUNDATION WALLS SHALL HAVE A MINIMUM OF 28 DAY COMPRESSIVE STRENGTH OF 3500 P.S.I.

3.8 WALL REINFORCING STEEL SHALL MEET ASTM A-615/A, 615M-12, MESH 6 X 6 - 1/4" 1/4 W.W.M. ASTM A-641/A, 641M-09a. REINFORCING IN FOOTINGS IS REQUIRED WHERE VARIATIONS IN SOIL CONDITIONS MAY EXIST OR AS NOTED ON SHEET AD-1.

3.9 THE BOTTOM OF ANY FOOTINGS SHALL BE PLACED AT MINIMUM FROST DEPTH AS REQUIRED BY LOCAL CODES. CONTRACTOR SHALL VERIFY REQUIRED DEPTH.

3.10 Poured Wall Vertical Reinforcing When Required Shall Be Placed A Minimum Of 1 1/2" Cover To Inside Face Of Wall.

## VERTICAL MASONRY

4.1 ALL MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ACI-530-13.

4.2 THE MAXIMUM VERTICAL DISTANCE OF UNBALANCED FILL MEASURED FROM THE TOP OF THE FLOOR SLAB TO THE OUTSIDE FINISHED GRADE SHALL NOT EXCEED THE FOLLOWING: HEIGHTS ARE FOR UNREINFORCED WALLS AND WHERE BACKFILL SOIL PROVIDES MEDIUM TO POOR DRAINAGE.

TYPE OF WALL HEIGHT OF FILL  
8" C.M.U. (HOLLOW) 4'-0"  
12" C.M.U. (HOLLOW) 5'-0"  
12" C.M.U. (SOLID) 6'-0"  
HEIGHTS MAY BE INCREASED WITH THE APPROVAL OF THE LOCAL JURISDICTION, OF REINFORCING.

4.3 CONCRETE MASONRY UNITS SHALL BE MANUFACTURED TO MEET ASTM C-90, GRADE A SOLID BLOCK OR ASTM C-145, GRADE B STANDARDS AND BE 28 DAYS OLD BEFORE INSTALLATION. MINIMUM NET COMPRESSION STRENGTH OF BLOCK TO BE 2000 P.S.I.

4.4 PARGING OVER C.M.U. WALLS TO BE NOT LESS THAN 3/8" PORTLAND CEMENT PARGING FROM FOOTING TO FINISHED GRADE.

4.5 EXTREME CARE AND PROPER MEASURES SHALL BE USED WHILE INSTALLING BACKFILL SO AS NOT TO DAMAGE, BULGE, OR TIP WALL. SHORING, BRACING, ETC., SHALL BE EMPLOYED UNTIL THE FULL DEAD LOAD OF THE BUILDING IS ON THE WALLS.

4.6 MASONRY LINTELS: PROVIDE LIGHT WEIGHT PRE-CAST LINTELS FOR ALL OPENINGS AND RECESSES IN C.M.U. WALLS. PROVIDE (1) 4 X 8 LINTEL FOR EACH 4" OF WALL THICKNESS. REINFORCE EACH LINTEL WITH 2 #4 BARS AT TOP AND BOTTOM AND WITH #2 TIES SPACED 9" O.C. UNLESS OTHERWISE NOTED. PRE-CAST LINTEL TO HAVE MINIMUM 8" BEARING AT EACH END. SUCH LINTELS SHALL NOT SUPPORT ANY SUPERIMPOSED LOADS.

4.7 USE TYPE "M" MORTAR FOR MASONRY IN CONTACT WITH EARTH.

4.8 USE TYPE "S" MORTAR FOR EXTERIOR ABOVE GRADE LOAD BEARING AND NON-LOAD BEARING WALLS, AND FOR OTHER APPLICATIONS WHERE ANOTHER TYPE IS NOT INDICATED.

4.9 MASONRY VENEER SHALL BE INSTALLED OVER A MOISTURE BARRIER OR APPROVED WATER REPELLENT SHEATHING. THROUGH-WALL FLASHING AND WEEPS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER MAY POTENTIALLY ENTER THE BUILDING ENVELOPE.

4.10 MASONRY VENEER SHALL BEAR ON MINIMUM 4" LEDGE W TIES TO BACK-UP AT 24" O.C. HORIZ. AND 16" O.C. VERT. VENEER SHOULD NOT EXCEED 30" ABOVE TOP OF FOUNDATION, EXCEPT GABLE ENDS MAY BE 38" MAXIMUM.

4.11 IF BRICK LEDGES ARE RECESSED INTO FOUNDATION WALLS THE RESULTING STEM WALL SHALL BE A MINIMUM 8" THICK FOR C.M.U. WALLS AND 6" FOR Poured IN PLACE WALLS.

4.12 PROVIDE WEEP HOLES ABOVE ALL FLASHING AT A MAXIMUM OF 33" O.C. MAINTAIN A MINIMUM OF 1" AIR SPACE BETWEEN VENEER AND SHEATHING.

4.13 ONLY IF APPLICABLE AND SHOWN ON THE DRAWINGS, FOR ATTACHED DWELLINGS, MASONRY FIREWALLS SHALL BE CONSTRUCTED OF CLASSIFICATION D-2, 8" C.M.U. IN ACCORDANCE WITH UL-1405 TO PROVIDE 2 HOUR SEPARATION FROM FOUNDATION TO UNDERSIDE OF ROOF SHEATHING.

4.14 BEAMS OR HEADERS BEARING ON MASONRY FIREWALLS SHALL HAVE A MINIMUM 4" MASONRY SEPARATION FROM ADJACENT DWELLING, AND SHALL BE FIRE CUT.

## METALS

5.1 ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM SPECIFICATION A-36.

5.2 STRAP ANCHORS OR ANCHOR BOLTS SHALL BE BUILDING INSPECTOR APPROVED. MINIMUM (2) 1/2" DIA. BOLTS PER SECTION OR PLATING 12" FROM EACH END WITH INTERMEDIATE BOLTS AT 4'-0" O.C. MAXIMUM. STRAP SPACING NOT TO EXCEED 3'-2" O.C.

5.3 METAL JOIST HANGERS SHALL BE USED AT ALL FLUSH CONNECTIONS TO SUPPORT THE FULL CAPACITY OF THE JOIST OR BEAM. CONNECTORS USED FOR P.T. LUMBER SHALL BE CORROSION RESISTANT AS APPROVED BY THE MANUFACTURE.

5.4 NAILING SCHEDULE: USE NUMBER AND TYPE FOR EACH APPLICATION AS CALLED FOR IN THE CURRENT MODEL CODE OR MANUFACTURER'S RECOMMENDED STANDARDS.

5.5 VENEER TIES SHALL BE 1" WIDE, 22GA, GALVANIZED STEEL INSTALLED 16" O.C. HORIZONTALLY AND 16" O.C. VERTICALLY.

5.6 PROVIDE STEEL LINTELS FOR ALL OPENINGS AND RECESSES IN BRICK OR BRICK FACED MASONRY WALL SO IF NOT SPECIFICALLY DETAILED PROVIDE (1) STEEL ANGLE FOR EACH 4" OF WALL THICKNESS. STEEL ANGLES TO HAVE MINIMUM 6" BEARING AT EACH END. HORIZONTAL LEG SHALL BE 3 1/2" UNLESS OTHERWISE SHOWN.

5.7 LINTEL SCHEDULE (UNLESS NOTED OTHERWISE ON PLANS):

L-1 3 1/2" X 3 1/2" X 5/16" STEEL ANGLE UP TO 3' OPG.  
L-2 4" X 3 1/2" X 5/16" STEEL ANGLE 3' TO 5' OPG.  
L-3 5" X 3 1/2" X 3/8" STEEL ANGLE 5' TO 6'-6" OPG.  
L-4 6" X 3 1/2" X 1/2" STEEL ANGLE UP TO 9' OPG.

5.8 LINTELS SHOWN SHALL NOT SUPPORT ANY SUPERIMPOSED LOADS.

5.9 ALL STEEL ANGLES IN MASONRY WALLS SHALL BE FLASHED AND PAINTED.

5.10 PAINT ALL EXTERIOR FERROUS OR GALVANIZED METALS EXCEPT COMPLETELY PRE-FINISHED FACTORY ITEMS.

5.11 ADJUSTABLE STEEL COLUMNS SHOWN ON THE DRAWINGS SHALL BE MANUFACTURED IN ACCORDANCE WITH CURRENT MODEL CODE STANDARDS IN O.D. SIZES SPECIFIED.

5.12 WOOD PLATE ATTACHMENT TO STEEL BEAMS SHALL BE WITH 1/2" DIA. BOLTS AT 24" STAGGERED O.C.

## WOOD

6.1 ALL STRUCTURAL LUMBER SHALL BE STAMPED IN ACCORDANCE WITH THE "CONSTRUCTION MANUAL" OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.

6.2 PRESSURE TREATED LUMBER SHALL CONFORM WITH AWPA-U1 & M4. PRESERVATIVES SHALL CONFORM TO AWPA-P1 / P13, P2, P5, P8, OR P9.

6.3 JOISTS AND GIRDERS: SEE PLANS FOR SIZE, SPACING AND MINIMUM GRADE AND SPECIES. HEM FIR AND SPRUCE-PINE-FIR (SPF) SHALL BE NORTHERN SPECIES ONLY. MAX MOISTURE CONTENT SHALL NOT EXCEED 19%.

6.4 PROVIDE DOUBLE SOLID JOISTS UNDER ALL PARALLEL PARTITIONS OVER 12'-0" IN LENGTH UNLESS MANUFACTURER'S SHOP DRAWINGS SHOW OTHERWISE.

6.5 WHEN ENGINEERED BEAMS ARE SPECIFIED ON THE DRAWINGS AS LVL OR PSL, THEY ARE INTERCHANGEABLE. (MIN. F/b = 2600 PSI) NO OTHER SUBSTITUTIONS ARE TO BE MADE WITHOUT ARCHITECT'S APPROVAL. ALL SUCH BEAMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURE'S WRITTEN INSTRUCTIONS.

6.6 BEARING WALL STUDS SHALL BE MINIMUM SPF STUD GRADE, KD OR BETTER.

6.7 EXTERIOR WALLS, UP TO 10' SUPPORTING (1) FLOOR & ROOF MAY BE 2X6 @ 16" O.C. SUPPORTING (2) FLOORS AND ROOF SHALL BE 2X6 @ 16" O.C.

6.8 INTERIOR NON-BEARING WALLS MAY BE SPF #3 2X4 STUDS, 24" O.C.

6.9 LATERAL WALL BRACING SHALL BE PROVIDED BY CONTINUOUS, APPROVED STRUCTURAL SHEATHING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPEC'S. ALTERNATE WALL BRACING MUST COMPLY W SECTION 60210 OF THEIRC.

6.10 RAFTERS - SEE PLANS FOR SIZE, SPACING, MINIMUM GRADE AND SPECIES.

6.11 DESIGN, FABRICATION AND INSTALLATION OF WOOD TRUSSES AND SHEET METAL CONNECTORS SHALL BE IN ACCORDANCE WITH ANSI TPI-2002. HANDLING, INSTALLATION AND BRACING SHALL BE IN ACCORDANCE WITH BCSI I-03. STRUCTURAL DESIGN SHALL BE BY A REGISTERED PROFESSIONAL ENGINEER.

6.12 BRACING OF WOOD TRUSSES TO BE IN ACCORDANCE WITH TRUSS PLATE INSTITUTE, INC. PUBLICATION: BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS - BCSI-I-03. INSTALL MIN. OF (2) 2X4 DIAGONAL BRACES AT APPROX. 45 DEGREES, FROM BOTTOM CHORD TO RIDGE IN EACH ROOF SECTION.

6.13 ALL O.S.B. USED STRUCTURALLY SHALL MEET THE PERFORMANCE STANDARDS AND ALL OTHER REQUIREMENTS OF APPLICABLE U.S. COMMERCIAL STANDARDS FOR THAT TYPE, GRADE AND SPECIES OF WOOD, AND SHALL BE IDENTIFIED BY AN APPROVED TESTING AGENCY.

6.14 O.S.B. SUBFLOORS SHALL BE GLUED AND SCREWED TO JOISTS IN ACCORDANCE WITH APA RECOMMENDATIONS. LEAVE 1/16" SPACE AT ALL EDGES FOR EXPANSION OR AS PER MANUF. RECOMMENDATIONS.

6.15 O.S.B. ROOF SHEATHING SHALL BE INSTALLED WITH PANEL CLIPS (1 PER BAY). LEAVE 1/16" SPACE AT PANEL ENDS.

6.16 REFERENCE TO NOMINAL THICKNESS SHALL MEAN THE FOLLOWING:

ACTUAL THICKNESS AND SPECIFICATION  
3/4" = 23/32" APA RATED STURDI-FLOOR 24" O.C. EXPOSURE  
5/8" = 19/32" APA RATED STURDI-FLOOR 24" O.C. EXPOSURE  
1/2" = 15/32" APA RATED SHEATHING 32/16 EXPOSURE  
7/16" = 7/16" RATED SHEATHING (O.S.B.) 24/16 EXPOSURE

6.17 ONLY IF APPLICABLE AND SHOWN ON THE DRAWINGS, ATTACHED DWELLINGS W/ 2 HOUR RATED FIRE SEPARATION SHALL HAVE FIRE RESISTANT TREATED (F.R.T.) ROOF SHEATHING 4' EACH SIDE OF THE PARTITION CENTERLINE. PLYWOOD SHALL BE CERTIFIED NOT TO CAUSE ACID HYDROLYSIS AT MOST CONDITIONS AT TEMPERATURE BELOW 400 F. ALTERNATIVES TO THE USE OF F.R.T. SHALL ONLY BE AS APPROVED FIRE SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH NFPA BD MAY ALLEVIATE THE NEED FOR F.R.T. IN CERTAIN JURISDICTIONS. VERIFY WITH BUILDING CODE OFFICIAL.

6.18 ALL WOOD LESS THAN 8" FROM GRADE OR IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED PER CURRENT AWPA STANDARDS.

6.19 NOTCHES IN TOP OR BOTTOM OF SOLID JOIST SHALL NOT EXCEED 1/6 OF DEPTH AND SHALL NOT OCCUR IN CENTER 1/3 OF SPAN.

6.20 HOLES BORED IN SOLID JOIST SHALL NOT BE WITHIN 2" OF TOP OR BOTTOM, AND SHALL NOT EXCEED 1/3 DEPTH.

6.21 UNLESS NOTED ELSEWHERE ON THESE DRAWINGS, STRUCTURAL WINDOW AND DOOR HEADERS SHALL BE MIN. SPF #2 (Fb = 875 P.S.I.) OF SIZE SPECIFIED ON DRAWINGS. ALL HEADERS SHALL BE MIN (2) 2 X 10 UNLESS OTHERWISE NOTED.

6.22 UNLESS NOTED ELSEWHERE ON THESE DRAWINGS, STRUCTURAL WINDOW AND DOOR JACK STUDS SHALL BE MIN. STUD GRADE, KD OR BETTER. PROVIDE SINGLE JACK STUD AT OPENINGS LESS THAN 4'-0" AND DOUBLE JACK STUDS AT OPENINGS UP TO 7'-0".

6.23 ALL FASTENERS SHALL BE IN ACCORDANCE WITH TABLE 602.3 OF THE IRC.

6.24 MULTIPLE STUDS OR POSTS SHALL BE BLOCKED SOLID THROUGH FLOORS AS REQUIRED TO PROVIDE CONTINUOUS SUPPORT TO THE FOUNDATION.

## THERMAL AND MOISTURE PROTECTION

7.1 DAMP-PROOFING, APPLY (1) COAT OF BITUMINOUS 3#/5Y OF ACRYLIC MODIFIED CEMENT OR ANY APPROVED WATERPROOFING TO EXTERIOR OF ALL BELOW GRADE WALLS AT BSM'T CONDITIONS.

7.2 SLAB VAPOR BARRIER, 6 MIL POLYETHYLENE SHEET WHERE NOTED ON DRAWINGS. OVERLAY ALL EDGES 6".

7.3 SILL SEALER, 1/2" X 5 1/2" COMPRESSIBLE FIBERGLASS BEHIND ALL EXTERIOR SILL PLATES, OR OTHER APPROVED SILL SEALER.

7.4 PROVIDE APPROVED CORROSION RESISTANT FLASHING AT THE INTERSECTIONS OF MASONRY AND WOOD FRAME CONSTRUCTION OVER PROJECTING WOOD TRIM. WHERE DECKS, PORCHES, ETC., ARE ATTACHED TO WOOD FRAME CONSTRUCTION AT WALL AND ROOF INTERSECTIONS, AT CHIMNEY AND ROOF INTERSECTIONS, IN ROOF VALLEYS, AT ALL ROOF PENETRATIONS, AND AT WALL OPENINGS IF RECOMMENDED BY WINDOW AND DOOR MANUFACTURER.

7.5 UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS, PROVIDE AND INSTALL THERMAL INSULATION AS SHOWN ON THE COVER SHEET. ALL INSULATION SHALL INCLUDE AN INTEGRAL VAPOR BARRIER POSITIONED ON THE WARM SIDE OF THE WALL / CEILING. EXPOSED INSULATION IN UNFINISHED SPACE SHALL HAVE A MIN. PS-25 FACING.

7.6 ROOFING, UNLESS OTHERWISE NOTED, ROOFING SHALL BE MIN. CLASS "C" FIBERGLASS BASED ASPHALT SHINGLES OVER #30 FELT. ATTACHED STRIP SHINGLES W/ MIN. OF 4 FASTENERS. EAVE FLASHING TO A POINT 24" INSIDE OF INTERIOR FACE OF WALL LINE MAY BE INSTALLED AT THE OWNER'S DISCRETION OR SPECIFIED ON THE COVER SHEET. USE DOUBLE UNDERLAYMENT FOR ROOF SLOPES LESS THAN 4/12 PITCH.

7.7 PROVIDE AND INSTALL CONTINUOUS STRUCTURAL WOOD PANEL SHEATHING IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND MODEL CODE REQUIREMENTS.

7.8 PROVIDE SIDING MATERIAL AS SHOWN ON DIAGRAMS AND INSTALLED PER MANUFACTURERS INSTRUCTIONS. INSTALL OVER #15 FELT OR APPROVED WEATHER SENSITIVE MATERIALS, AIR INFILTRATION BARRIER OR MOISTURE RESISTANT SHEATHING.

7.9 GUTTERS SHALL BE .032" PREFINISHED ALUMINUM GUTTERS WITH .024" PREFINISHED ALUMINUM LEADERS. LEAD TO SPLASH BLOCKS OR AS REQUIRED BY THE LOCAL JURISDICTION. COORDINATE WITH SITE PLAN.

7.10 PROVIDE SOFFIT VENTS, RIDGE VENTS, OR GABLE END VENTS AS SHOWN ON THE DRAWINGS. MAINTAIN MINIMUM 1/300 FREE VENTILATION FOR HORIZONTALLY PROJECTED ROOF AREA. INSTALL PLASTIC OR CARDBOARD BAFFLES IN EACH TRUSS / RAFTER BAY TO MAINTAIN FREE AIR FLOW. ALL REVERSE GABLES SHALL BE OPEN TO MAIN ROOF ATTIC TO ALLOW FREE AIR FLOW.

## DOORS AND WINDOWS

8.1 THE CONTRACTOR SHALL VERIFY AND COORDINATE ROUGH OPENINGS FOR ALL DOOR AND WINDOWS PRIOR TO START OF CONSTRUCTION. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

8.2 EACH BEDROOM SPACE (UNLESS AMENDED OTHERWISE BY LOCAL JURISDICTIONS) SHALL HAVE AT LEAST ONE OPERABLE WINDOW PROVIDING 5.7 S.F. (5.4 S.F. AT GRADE CONDITIONS) OF NET CLEAR OPENING AS CERTIFIED BY THE MANUFACTURER, WITH A SILL HEIGHT OF NOT MORE THAN 44" A.F.F. OR OTHER CLEAR DIRECT MEANS OF EGRESS TO THE OUTSIDE. WINDOW WELLS, IF REQUIRED, SHALL BE MIN. 3' X 3'.

8.3 SAFETY (TEMPERED) GLAZING SHALL BE PROVIDED IN:

- \* GLASS DOORS AND SIDELIGHTS
- \* SHOWER AND TUB ENCLOSURES
- \* WINDOWS WITHIN 60" OF TUB OR SHOWER
- \* GLAZING ON STAIR LANDINGS
- \* FIXED PANELS GREATER THAN 9.0 S.F. WITHIN 18" A.F.F.
- \* GLAZING WITHIN 12" OF A STAIR RAILING
- \* GLAZING WITHIN 24" RADIUS OF CLOSED DOORS ON HINGE SIDE

8.4 IF APPLICABLE, PROVIDE SELF-CLOSING DOOR BETWEEN DWELLING AND GARAGE. DOOR SHALL BE 1 3/4" THICK SOLID WOOD OR INSULATED STEEL W/ 20" MIN. FIRE RATING.

## FINISHES

9.1 DRYWALL: 1/2" TAPERED EDGE GYPSUM BOARD APPLIED, TAPED, AND FINISHED IN ACCORDANCE WITH GYPSUM ASSOCIATION GA-216 AND ASTM C-840.

9.2 5/8" GYPSUM BOARD IS TO BE USED TO COMPLETELY SEPARATE GARAGE FROM LIVING AREA, APPLIED ON GARAGE SIDE PER THE PLANS, OR IN A MANNER ACCEPTABLE TO LOCAL JURISDICTION.

9.3 IF APPLICABLE AND AS SHOWN ON THE DRAWINGS, PROVIDE FIRE RESISTANT RATED ASSEMBLIES AS DETAILED FOR PARTITIONWALLS OR OTHER RATED WALLS OR FLOORS. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE TESTING AGENCY'S REQUIREMENTS.

9.4 UNDERSIDE AND WALLS OF ACCESSIBLE ENCLOSED SPACE UNDER STAIRS SHALL BE PROTECTED W/ 1/2" GYPSUM BOARD.

9.5 WHEN CERAMIC TILE IS USED, CEMENT FIBER GYPSUM BOARD 1/2" THICK, OR APPROVED EQUAL, IS REQUIRED AT TUB AND SHOWER SURROUNDS TO A HEIGHT OF 36" ABOVE TUB OR SHOWER PAN. GLASS MESH CEMENT BOARD IS A PREFERRED ALTERNATE.

9.6 PAINT (INTERIOR) UNLESS DIRECTED OTHERWISE:

- \* CEILINGS: (1) COAT PRIMER, (1) COAT FLAT LATEX
- \* FINISH WALLS: (1) COAT PRIMER, (1) COAT FLAT LATEX
- \* FINISH TRIM: (1) COAT PRIMER, (1) COAT SEMI-GLOSS ENAMEL

9.7 PAINT (EXTERIOR) UNLESS DIRECTED OTHERWISE:

- \* PRIMER (1) COAT, EXTERIOR GRADE EXTERIOR LATEX ENAMEL

9.8 CERAMIC TILE WALLS SHALL BE GLAZED MOSAIC TILE OVER CEMENT FIBER GYPSUM BOARD OR GLASS MESH MORTAR UNITS. USE THIN SET ORGANIC ADHESIVE (ANSI A108.4) OVER GYPSUM BOARD AND DRY-SET LATEX PORTLAND MORTAR (ANSI A108.5) OVER CEMENT BOARD. FLOOR TILES SHALL BE GLAZED MOSAIC TILE OVER MINIMUM 5/8" PLYWOOD UNDERLAYMENT, SCREED 12" O.C. TO SUB FLOOR OR AS RECOMMENDED BY MANUFACTURER. USE EPOXY MORTAR AND GROUP APPLICATION (ANSI A118.3). JOIST SPACING SHALL NOT EXCEED 19.2" O.C.

9.9 RESILIENT FLOORS SHALL BE SHEET VINYL RESILIENT FLOORING OVER 1/4" MIN. FIBERBOARD OR PLYWOOD UNDERLAYMENT OR AS DIRECTED BY THE OWNER.

## SPECIALTIES

10.1 IF APPLICABLE, PREBUILT FIREPLACES SHALL BE U.L. APPROVED AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

10.2 TOILET AND BATH ACCESSORIES SHALL BE AS SPECIFIED BY THE OWNER.

10.3 MIRRORS: MIRROR QUALITY AND SIZE PER PLANS, OR AS SPECIFIED BY THE OWNER.

10.4 PROVIDE EITHER SHOWER RODS 80" A.F.F. OR TEMPERED OR SAFETY LAMINATE GLASS DOORS, AS SPECIFIED BY THE OWNER.

## MECHANICAL

11.1 HVAC AND PLUMBING CONTRACTORS SHALL COORDINATE ALL OPENINGS IN JOISTS, TRUSSES, ETC., WITH GENERAL CONTRACTOR BEFORE PROCEEDING WITH ANY WORK. ALL WORK SHALL BE IN COMPLIANCE WITH ALL LOCAL MECHANICAL AND PLUMBING CODES.

11.2 PROVIDE ONE DAMPER REGISTER PER 900 S.F. OF UNFINISHED BASEMENT SPACE IF APPLICABLE.

11.3 PROVIDE EXHAUST FANS AT EACH BATH, AND VENT TO EXTERIOR OF DWELLING.

11.4 IF APPLICABLE AND REQUIRED BY THE GOVERNING LAWS, PROVIDE FIRE SUPPRESSION SYSTEMS IN ACCORDANCE WITH NFPA 13D. CONFIRM SUCH REQUIREMENTS WITH THE LOCAL JURISDICTION BEFORE PROCEEDING WITH ANY WORK.

11.5 ALL DUCTWORK THAT PENETRATES A RATED WALL OR FLOOR ASSEMBLY SHALL BE PROVIDED WITH FIRE DAMPERS.

11.6 ALL VENTS AND FLUES SHALL BE INSTALLED WITH A MINIMUM OF 1" CLEARANCE TO ADJACENT WOOD FRAMING, GREATER IF SPECIFIED BY MANUFACTURER.

11.7 ANY PIPING PASSING UNDER FOOTINGS OR THROUGH A FOUNDATION WALL OR SLAB SHALL BE PROVIDED WITH A SLEEVE THAT IS TWO PIPE SIZES LARGER THAN THE SUBJECT PIPE.

11.8 PROVIDE OVERFLOW PANS AND DRAINS FOR WASHER AND/OR WATER HEATER WHEN LOCATED ON A WOOD FLOOR SYSTEM.

11.9 PROVIDE HOSE BIBS (FREEZE PROOF OR WITH SHUT OFFS) AT FRONT AND REAR OF DWELLINGS, OR AS SHOWN ON THE DRAWINGS.

11.10 PROVIDE 1 1/2" CONDENSATE LINE FROM WATER HEATER AND AIR HANDLER TO POSITIVE OUTFALL OR TO SUMP PUMP IF PROVIDED OR AS DIRECTED BY LOCAL JURISDICTION.

## ELECTRICAL

12.1 WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, THE LOCAL POWER COMPANY, AND TO ALL APPLICABLE LOCAL REGULATIONS, FIXTURES AND APPLIANCES, AS NOTED ON THE DRAWINGS.

12.2 ALL RECEPTACLES SHALL BE TAMPER RESISTANT.

12.3 PROVIDE G.F.I. RECEPTACLES AT ALL WET LOCATIONS AND IN ACCORDANCE WITH N.E.C. REQUIREMENTS.

12.4 ALL BRANCH CIRCUITS NOT COVERED BY G.F.I. RECEPTICLES SHALL BE PROTECTED BY ARC-FAULT CIRCUIT INTERRUPTERS PER N.E.C.

12.5 ALL RECEPTACLES AT KITCHEN COUNTERS, VANITIES AND REFRIGERATOR TO BE 42" A.F.F. ALL OTHERS TO BE 18" A.F.F. SWITCHES SHALL BE 48" MAX. A.F.F.

12.6 PROVIDE HARDWIRED SMOKE DETECTORS IN EACH SLEEPING ROOM AND AT EACH FLOOR LEVEL WITHIN 10' OF EACH SLEEPING AREA, NOT CLOSER THAN 4' FROM RETURN AIR INLETS. ALL DETECTORS SHALL BE INTERCONNECTED TO SOUND SIMULTANEOUSLY.

12.7 PROVIDE CARBON MONOXIDE DETECTORS WITHIN 10' OF EACH SLEEPING ROOM. CARBON MONOXIDE DETECTORS ARE NOT REQUIRED TO BE INTERCONNECTED.

12.8 IF REQUIRED BY THE LOCAL JURISDICTION, PROVIDE FOR FUTURE INSTALLATION OF AN ACTIVE RADON EXTRACTION FAN (W/ SWITCH), LOCATED IN ATTIC SPACE.

12.9 ALL PERMANENT APPLIANCES SHALL BE PROVIDED WITH BRANCH CIRCUIT OVER CURRENT DISCONNECTION. FOR APPLIANCES RATED OVER 300 VOLT-AMPS, OR 1/8 H.P. DISCONNECT SHALL BE WITHIN LINE OF SIGHT.

12.10 PROGRAMMABLE THERMOSTAT WITH SETBACK CAPABILITY REQUIRED.

12.11 A MINIMUM OF 90% OF THE LAMPS IN PERMANENTLY INSTALLED FIXTURES SHALL BE HIGH EFFICACY.

RENSBERGER  
AND FAMILY LLC  
BUILDER

HAWK GARAGE  
DRAWING TITLE  
NOTE SHEET  
HOUSE NAME:  
DRAWING NO.:  
SHEET NO.: N2

# ENERGY EFFICIENCY 2018 IECC

CODE SECTION	STANDARD (MINIMUM)
R301.1	CLIMATE ZONE 4A
R401.2	COMPLIANCE METHOD *MANDATORY AND PRESCRIPTIVE PROVISIONS
R402.1.1	VAPOR RETARDER WALL ASSEMBLIES IN THE BLDG THERMAL ENVELOPE SHALL COMPLY W VAPOR RETARDER REQUIREMENTS OF SECTION R102.7 OF THE IRC, 2018 EDITION
R402.1.2	ATTIC INSULATION ATTIC INSULATION: R-49, RAISED HEEL TRUSSES: R-38
R402.1.2	WOOD FRAMED WALL R-20 OR R-13 + R-5 CONTINUOUS INSULATION
R402.1.2	BASEMENT WALL INSULATION R-13 / R-10 FOIL FACED CONTINUOUS, UNINTERRUPTED BATTs FULL HEIGHT
R402.1.2	CRAWL SPACE WALL INSUL. R-13 / R-10 FOIL FACED CONTINUOUS BATTs FULL HEIGHT EXTENDING FROM FLOOR ABOVE TO FINISH GRADE LEVEL AND THEN VERTICALLY OR HORIZONTALLY AN ADDITIONAL 2'-0"
R402.1.2	FLOOR INSULATION OVER UNCONDITIONED SPACE R-14 BATT INSULATION
R402.1.2	WINDOW U-VALUES / SHSC 035 (U-VALUE) & 0.40 (SHSC)
R402.2.10	SLAB ON GRADE FLOOR <12" BELOW GRADE R-10 RIGID FOAM BOARD UNDER SLAB EXTENDING EITHER 2'-0" HORIZONTALLY OR 2'-0" VERTICALLY
R402.2.4	ATTIC ACCESS ATTIC ACCESS SCUTTLE WILL BE WEATHERSTRIPPED AND INSULATED R-49
R402.4	BUILDING THERMAL ENVELOPE (AIR LEAKAGE) EXTERIOR WALLS AND PENETRATIONS WILL BE SEALED PER THIS SECTION OF THE 2012 IECC W CAULK, GASKETS, WEATHERSTRIPPING OR AN AIR BARRIER OF SUITABLE MATERIAL. SEALING METHODS BTWN DISSIMILAR SHALL ALLOW FOR DIFFERENT EXPANSION AND CONTRACTION
R402.4.12	BUILDING THERMAL ENVELOPE (TIGHTNESS TEST) BUILDING ENVELOPE SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 3 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED IN ACCORDANCE W/ ASTM E779 OR ASTM I227 W/ (BLOWER DOOR) AT A PRESSURE OF 0.2 IN. (50 PASCALS). TESTING SHALL BE CONDUCTED BY AN APPROVED 3RD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING INSPECTOR
R402.4.2	FIREPLACES NEW WOOD BURNING FIREPLACES WILL HAVE TIGHT-FITTING FLUE DAMPERS OR DOORS AND OUTDOOR COMBUSTION AIR. FIREPLACE DOORS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 127 (FACTORY BUILT FIREPLACES) AND UL 907 (MASONRY FIREPLACES)
R402.4.4	ROOMS CONTAINING FUEL BURNING APPLIANCES WHERE OPEN COMBUSTION AIR DUCTS PROVIDE COMBUSTION AIR TO OPEN COMBUSTION FUEL BURNING APPLIANCES, THE APPLIANCES AND COMBUSTION AIR SHALL BE LOCATED OUTSIDE THE BLDG THERMAL ENVELOPE OR ENCLOSED IN A ROOM ISOLATED FROM INSIDE THE THERMAL ENVELOPE. EXCEPTIONS: 1 - DIRECT VENT APPLIANCES W/ BOTH INTAKE AND EXHAUST PIPES INSTALLED CONTINUOUS TO OUTSIDE. 2 - FIREPLACES AND STOVES COMPLYING W/ SECTION R402.4.2 AND SECTION R1006 OF THE IRC.
R402.4.5	RECESSED LIGHTING RECESSED LUMINARIES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE
R403.1.1	THERMOSTAT ALL DWELLING UNITS WILL HAVE AT LEAST (1) PROGRAMMABLE THERMOSTAT FOR EACH SEPARATE HEATING AND COOLING SYSTEM PER 2018 IECC SECTION 403.1
R403.1.2	HEAT PUMP SUPPLEMENTARY HEAT (MANDATORY) WHERE A HEAT PUMP SYSTEM HAVING SUPPLEMENTARY ELECTRIC RESISTANCE HEAT IS USED, THE THERMOSTAT SHALL PREVENT THE SUPPLEMENTARY HEAT FROM COMING ON WHEN HEAT PUMP CAN MEET HEATING LOAD
R403.3.1	MECHANICAL DUCT INSULATION SUPPLY AND RETURN DUCTS IN ATTIC R-8 MIN, R-6 WHEN LESS THAN 3". SUPPLY AND RETURN DUCTS OUTSIDE OF CONDITIONED SPACES R-8 MIN. ALL OTHER DUCTS EXCEPT THOSE LOCATED COMPLETELY INSIDE THE BLDG THERMAL ENVELOPE R-6 MIN. DUCTS LOCATED UNDER CONC SLABS R-6 MIN.
R403.3.2	DUCT SEALING ALL DUCTS, AIR HANDLERS, FILTER BOXED WILL BE SEALED. JOINTS AND SEAMS WILL COMPLY WITH SECTION M1601.41 OF THEIRC
R403.6	MECHANICAL VENTILATION OUTDOOR (MAKE-UP AND EXHAUSTS) AIR DUCTS TO BE PROVIDED WITH AUTOMATIC OF GRAVITY DAMPER THAT LOSES WHEN THE VENTILATION SYSTEM IS NOT OPERATING
R403.6.1	WHOLE HOUSE MECH. VENT SYSTEM FAN EFFICACY TO COMPLY WITH TABLE R403.6.1
R403.7	EQUIPMENT SIZING TO COMPLY WITH R403.7
R404.1	LIGHTING EQUIPMENT A MINIMUM OF 90% OF ALL LAMPS (LIGHTS) MUST BE HIGH EFFICIENCY LAMPS
	WATER HEATER MINIMUM EFFICIENCY ESTABLISHED BY NAECA
	MECHANICAL TESTING ALL MECHANICAL TESTING TO BE BY: THIS CONTRACTOR ALSO IS RESPONSIBLE FOR GENERATING CERTIFICATE OF COMPLIANCE AND AFFIXING TO ELECTRICAL PANEL OR WITHIN 6'-0" OF THE ELECTRICAL PANEL AND BE READILY VISIBLE

NOTE: \*ALTERNATIVE COMPLIANCE BY PERFORMANCE ALTERNATIVE WHEN PREPARED BY ENERGY PROFESSIONAL (ENERGY ANALYSIS OR UA ALTERNATIVE) OR ERI OF 54 OR LESS  
 \*\* R-38 IS DEEMED SATISFACTORY WHEN FULL UNCOMPRESSED THICKNESS OF R-38 IS MAINTAINED OVER TOP PLATE AND AT THE EAVES. (REQUIRES MIN. 14" HEELS)  
 BUILDER CONTRACTOR SHALL CONFIRM WITH LOCAL JURISDICTION SPECIFIC REQUIREMENTS FOR DOCUMENTATION AND / OR CERTIFICATION OF COMPLIANCE

## PROJECT DESIGN DATA

### APPLICABLE STANDARDS

THE FOLLOWING DATA AND ACCOMPANYING SPECIFICATIONS ARE BASED ON THE GENERAL REQUIREMENTS OF THE 2018 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS, AND ALL STATE AND LOCAL JURISDICTION AMENDMENTS. THEY ARE INTENDED TO BE APPLICABLE ONLY TO DETACHED ONE AND TWO FAMILY DWELLINGS AND MULTIPLE, ATTACHED SINGLE-FAMILY DWELLINGS, NOT MORE THAN THREE STORIES IN HEIGHT (EXCLUDING BASEMENTS) WITH SEPARATE, INDEPENDENT MEANS OF EGRESS. TWO-FAMILY DWELLINGS SHALL BE COMPLETELY SEPARATED FROM EACH OTHER BY A ONE-HOUR FIRE RATED WALL OR FLOOR SEPARATION ASSEMBLY. TOWNHOUSE DWELLINGS SHALL BE SEPARATED BY A MINIMUM COMMON ONE-HOUR FIRE RATED WALL ASSEMBLY. NFPA-13D FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ALL DWELLINGS.

### BUILDING CRITERIA

RESIDENTIAL SINGLE FAMILY CONSTRUCTION TYPE	(R-3)
	V-B (5-B)

### CLIMATE & GEOGRAPHIC DESIGN CRITERIA

FLOOR LIVE LOAD	40 PSF
ROOF LIVE LOAD	30 PSF
SNOW LOAD (Pg)	35 PSF
WIND SPEED ULTIMATE	115 MPH, EXPOSE C
ATTICS W/ STORAGE	10 PSF
ATTICS W/ NO STORAGE	20 PSF
HABITABLE ATTICS	30 PSF
STAIRS	40 PSF
DECKS & BALCONIES (EXT.)	40 PSF
GUARD & HANDRAILS	200# (CONT. AND DIR.)
INFILL GUARDS	50# PER 1 SF
SEISMIC CATEGORY	B
(LIGHT FRAME STRUCTURAL SYSTEM WITH SHEAR WALLS)	
CONCRETE WEATHERING	SEVERE
TERMITE INFESTATION	MODERATE TO HEAVY
DECAY PROBABILITY	MODERATE
ICE UNDERLAYMENT	YES
FROST DEPTH	32"

NOTE: VALUES SHOWN ARE MINIMUM - CONFIRM WITH LOCAL CODE OFFICIAL PRIOR TO CONSTRUCTION

### LISTED ASSEMBLIES (WHERE APPLICABLE)

CHANGE	DATE	1-HOUR RATING	UL #U305 (WALL)
			UL #L534 (OPEN WEB FLOOR TRUSSES)
			UL #L544 (I-JOIST)
			UL #L512 (MIN. 2X10 JOIST)
		2-HOUR RATING	UL #U334 (SINGLE WALL)
			FM #WP360 (DOUBLE WALL)
			UL #U336 (SHAFT WALL)

### WIND BRACING

COMPLIANCE FOR WIND BRACING AS SPECIFIED IN THEIRC - R602.10 HAD BEEN SATISFIED BY "CONTINUOUS SHEATHED WOOD STRUCTURAL PANELS" (CS-WSP) AND ENGINEERED ALTERNATIVE METHODS AS REQUIRED. REFER TO DRAWINGS FOR SPECIFIC REQUIREMENTS.

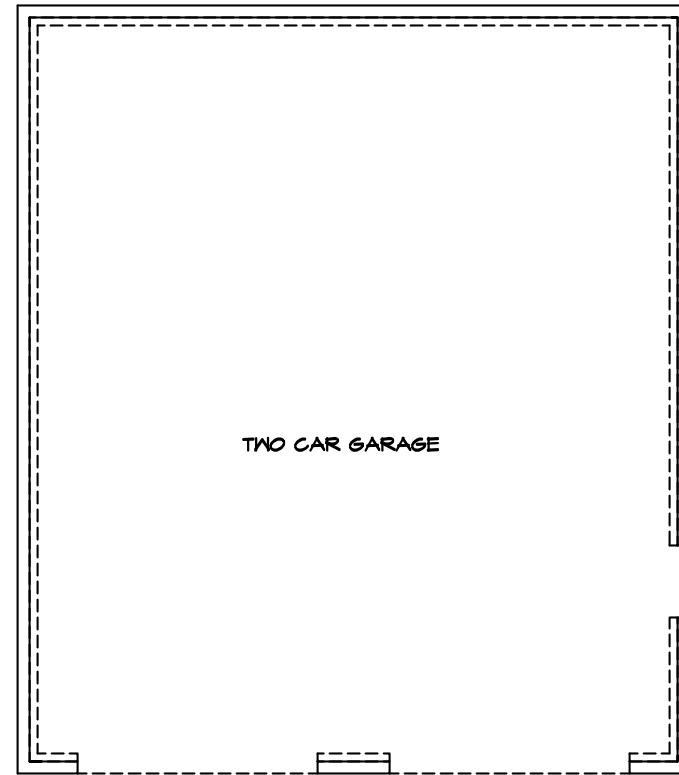
### FIRE RESISTANT CONSTRUCTION (REQUIRED)

EXTERIOR WALLS > 3' FIRESEPARATION DISTANCE	0 HOUR
EXTERIOR WALLS < 3' FIRESEPARATION DISTANCE	1 HOUR
DWELLING UNIT SEPARATION (MINIMUM)	1 HOUR
REFER TO DRAWINGS FOR SPECIFIC REQUIREMENTS	

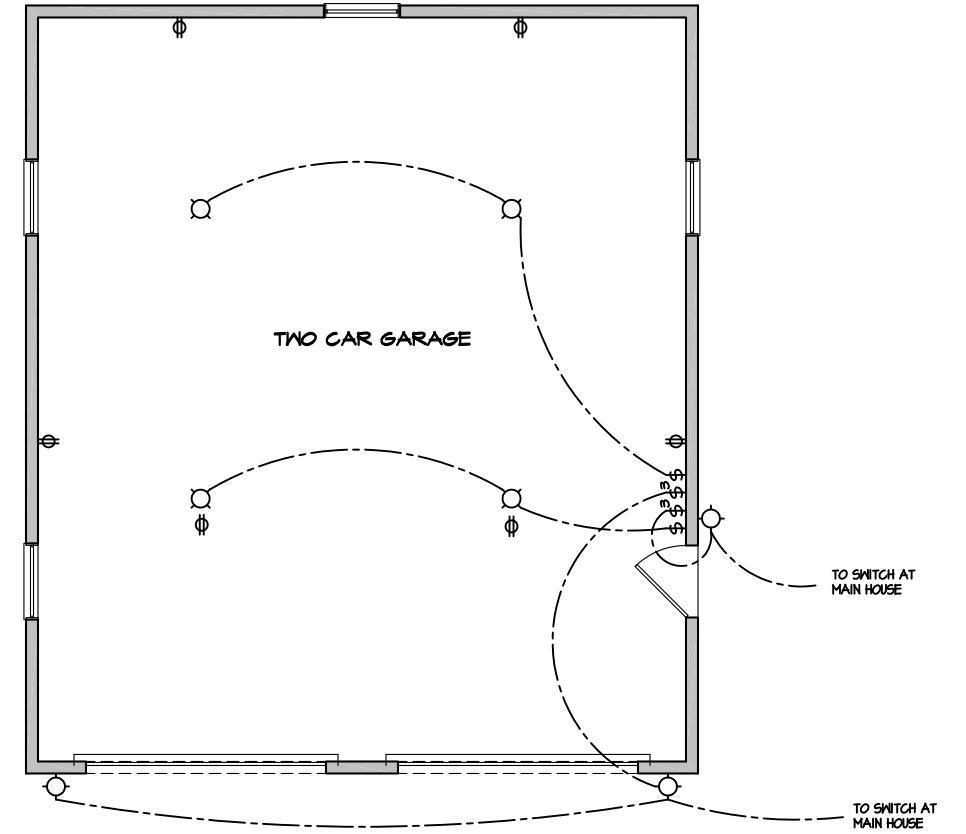
RENSBERGER  
AND FAMILY LLC  
BUILDER

HAWK GARAGE  
DRAWING TITLE  
NOTE SHEET  
HOUSE NAME:  
SHEET No.:

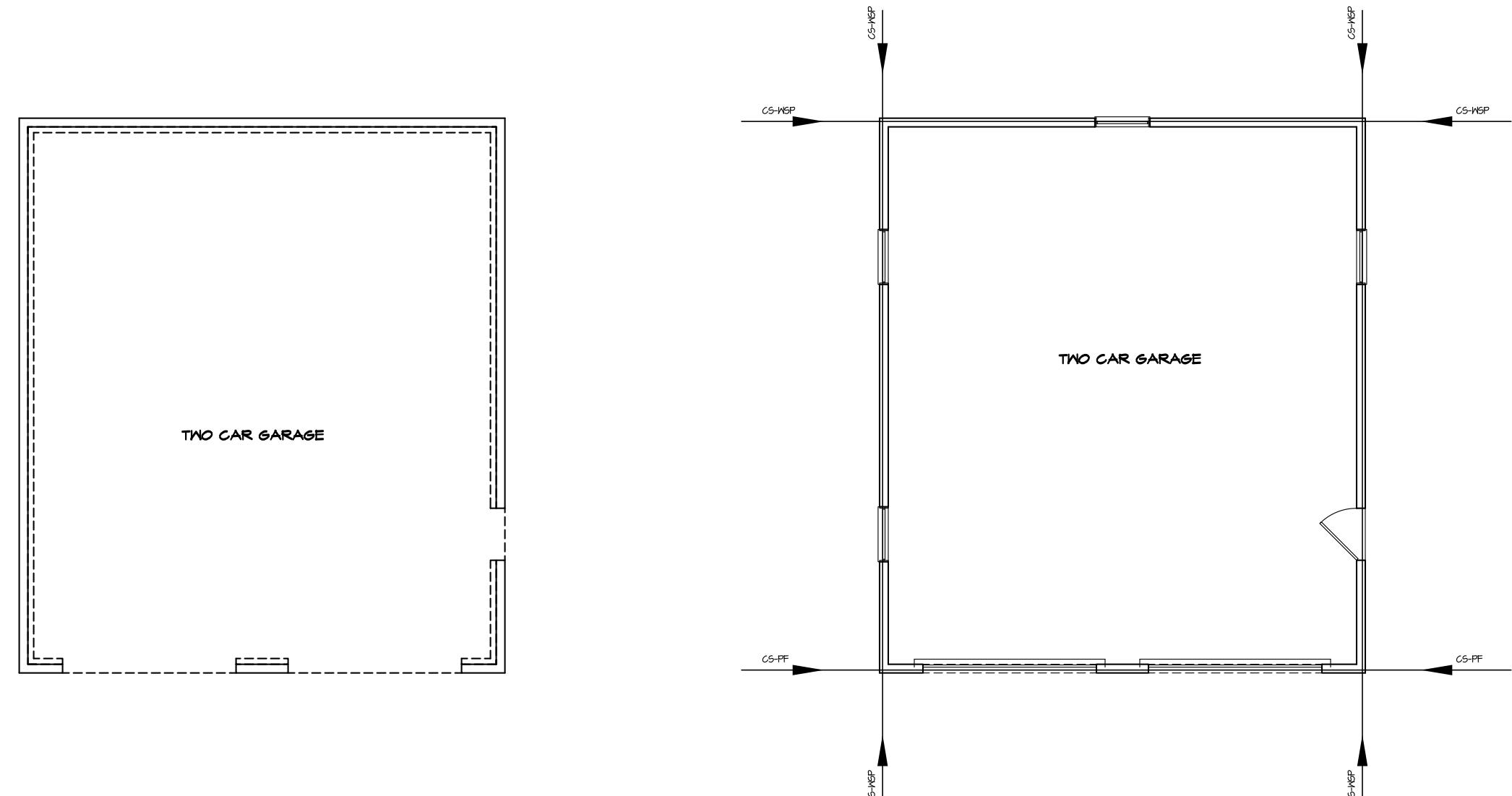
23



ELECTRICAL LEGEND	
	SINGLE POLE SWITCH
	THREE WAY SWITCH
	FOUR WAY SWITCH
	DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE - BOTTOM HALF SWITCHED
	DUPLEX RECEPTACLE - FLOOR MOUNTED
	RECEPTACLE - 220V
	DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE
	SMOKE DETECTOR - WIRED IN SERIES
	CO2 DETECTOR
	EXHAUST FAN MOTOR
	EXHAUST FAN / LIGHT COMBO
	DOOR CHIME
	LIGHT FIXTURE - WALL MOUNTED
	LIGHT FIXTURE - CEILING MOUNTED
	LIGHT FIXTURE - HANGING
	LIGHT FIXTURE - RECESSED
	LIGHT FIXTURE - LED DISC
	LIGHT FIXTURE - EYEBALL RECESSED
	PULLCHAIN LAMPHOLDER
	KEYLESS LAMPHOLDER
	CABLE TV
	TELEPHONE



ELECTRICAL PLAN  
SCALE: 1/8" = 1'-0"

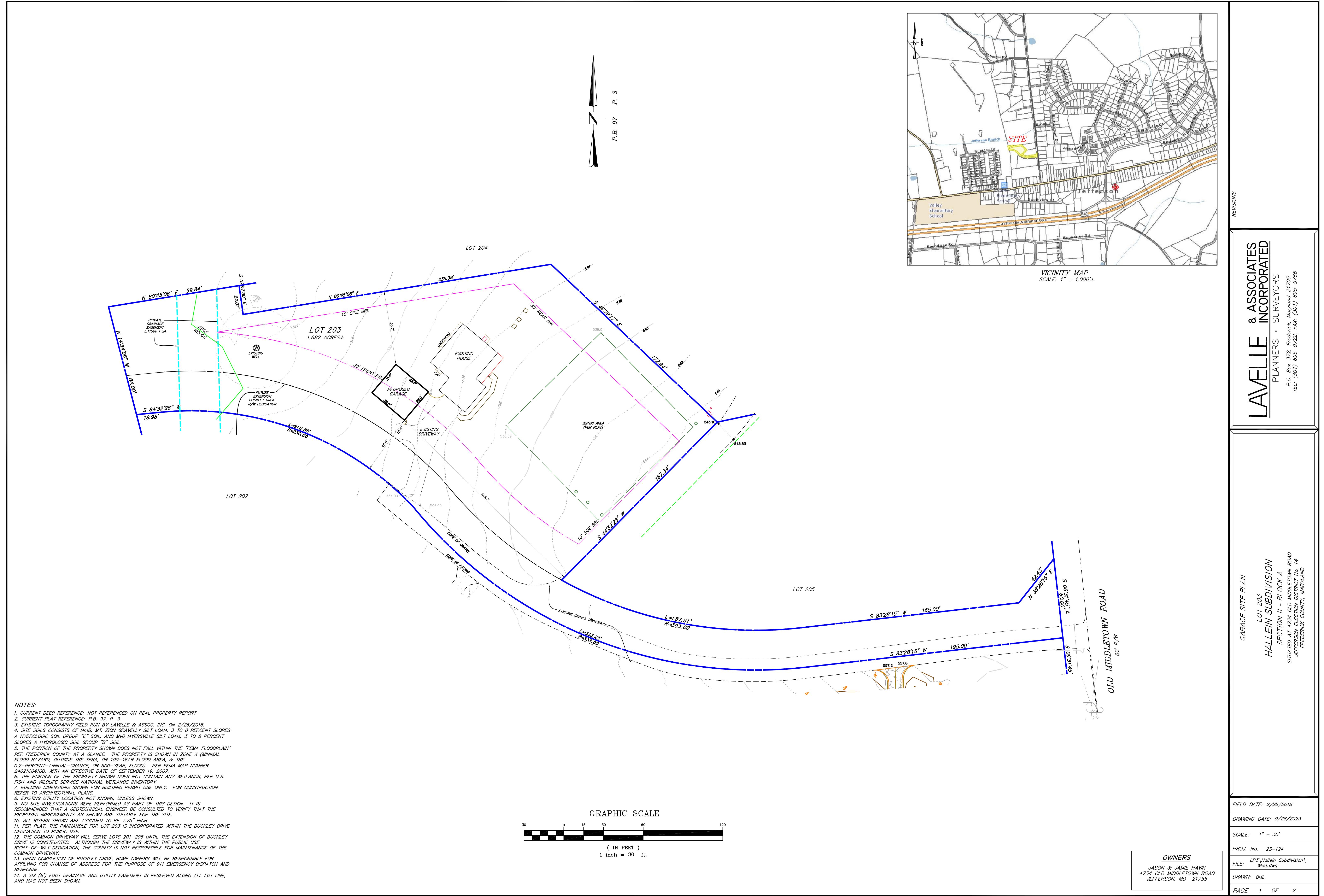


**FIRST FLOOR PLAN  
BRACED WALL LINES**

SCALE: 1/8" = 1'-0"

ALL DESIGNATED EXTERIOR BRACED WALLS SHALL BE A MINIMUM 7/16" OSB PANEL SHEATHING ATTACHED TO FRAMING WITH 2d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE FRAMING MEMBERS. SOLE PLATES SHALL BE FASTENED TO JOIST OF SOLID BLOCKING WITH (3) 16d NAILS AT 16" O.C. JOIST TO PLATE OR SILL 8d @ 6" O.C. TOENAIL. ALL DESIGNATED INTERIOR BRACED WALLS SHALL BE MIN. 1/2" GYP BOARD APPLIED TO BOTH FACES OF FRAMING WITH ADHESIVE AND TYPE S OR K SCREWS AT 1" O.C. AT EDGES AND 8" O.C. AT INTERMEDIATE SUPPORTS.

THIS DRAWING SHOWS BRACED WALL LINES WITH "CONTINUOUS STRUCTURAL PANEL SHEATHING" MEETING THE MINIMUM REQUIREMENTS OF SECTION R602.10.4.2 OF THE IRC. BRACED WALLS ARE OF THE MINIMUM LENGTHS SPECIFIED IN IRC2018 R602.10.7.



# Affidavit of Ownership

Jason R. Hawk and Jamie J. Hawk are the Legal owners and reside at the following address in Frederick, MD since 2022:

**4734 Old Middletown Rd**

**Jefferson MD 21755**

Tax ID#: 14-592921

Lot #203 BLK A Section II, Plat #97-3

Liber 12761 Folio 131

As the owners of the above property, we hereby authorize C.E. Rensberger & Family LLC and their employees, Rose Borisow and Joel Rensberger, to make the appeal to the Board of Appeals for Frederick County, MD to enable us to construct an Accessory Dwelling Unit on our property.

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Jason R Hawk

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Date

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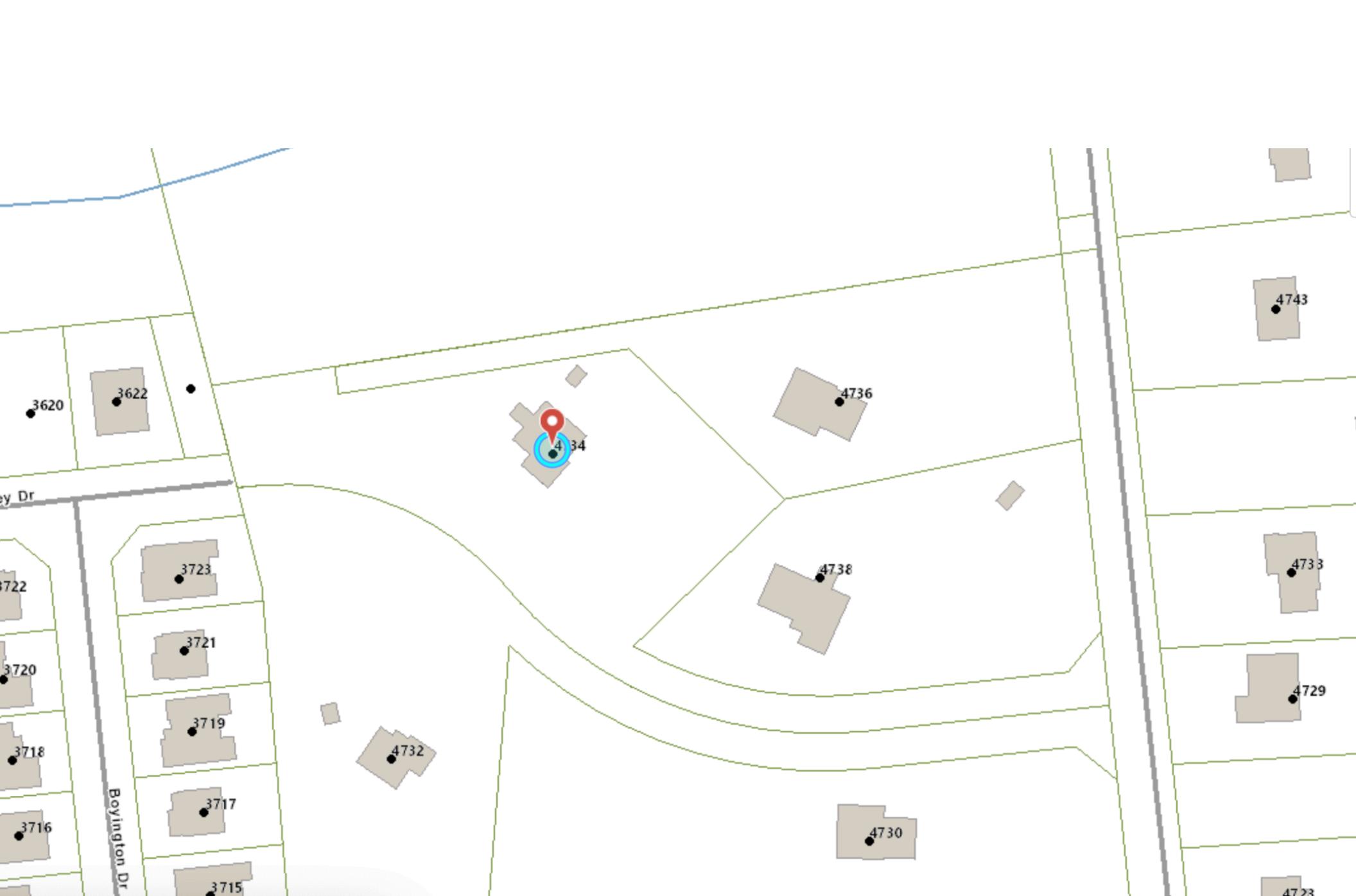


Jamie J. Hawk

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Date





**Date:** August 11, 2023

**To:** Chair and Board of Appeals Members, Frederick County Md. (BoA)

**Cc:** Mike Paone, Jason Hawk, Rose Borisow, file

**Regarding:** Justification Letter: Proposed 15' variance from the required 30' front yard Building Restriction Line, 4734 Old Middletown Rd, Jefferson, MD 21755

**Dear Board Chair and Members,**

This letter and accompanying package are to appeal to the Board of Appeals (BoA) for permission to build a detached garage that, when finished, would lie 15 feet over an unusually placed front 30 foot building restriction line (BRL). A special exception is requested. The Hawk family has lived on the property for years. If a special exception is granted the proposed garage would be 45 feet from the closest property line; hopefully you will find this reasonable. Mr. Hawk is a Frederick County Public Schools administrator at Crestwood Middle School. Mrs. Hawk is a teacher at Brunswick Elementary School. Both are active in their community in other ways as well.

The unusual front BRL is the result of a hypothetical future connector road to an adjacent planned unit development (PUD). No one expects or wishes for this connector road to be built. There is no support for it in the community. Mr. and Mrs. Hawk were unaware of this unusual BRL at the time they purchased their home, and when visiting this small subdivision, it does not logically appear to be a front at all. They lay of the land is such that this is actually a side yard in question.

We feel this accommodation is reasonable, affordable, and in keeping with both the neighborhood characteristic and planned zoning use.

This requested 15 foot encroachment is supported by all of the surrounding neighbors.

The applicable section of the Zoning Ordinance is 1-19-3.220. Current Zoning is Low Density Residential (R3)

The Hawk's lot is unique in several ways. It lies at the bottom of the hill; it has wet soils. The front yard is consumed by the septic field. The back yard is crippled by the northern property line. The proposed left side yard garage is the logical place to locate the garage, so as to spare the Hawks and their children the loss of the small back yard they do have.

- A. The Board of Appeals may authorize a variance in height, lot area, and yard regulations.** The Applicant request is for a 15 foot variance from the required 30 foot yard regulation.
- B. An application for variance shall be filed with the Board of Appeals only after refusal of zoning approval or an adverse determination has been issued by the Zoning Administrator.** Mr. Paone has advised that this matter requires BoA review and approval.
- C. The Board of Appeals shall not grant a variance unless and until a public hearing is held and all of the following criteria are met:**

- (a) First, the Board of Appeals shall find that special conditions and circumstances exist which are unique to the land or structure involved and which are not applicable to other lands or structures in the same district.

This Lot is unique to the area as it is the only one situated at the bottom of the hill, bordered by wet soils, and has a very small back yard. When created the lot was manipulated in order to accommodate the public frontage requirement and include the well location, leaving little usable area, unlike the other lots in this subdivision.

- D. Upon making its finding, the Board of Appeals shall also find that the following criteria are met:**

- (a) That the special conditions and circumstances do not result from the actions of the applicant.

The applicant did not take any action to create this condition.

- (b) The literal interpretation of the provisions of this chapter would result in unreasonable hardship and deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this chapter.

Literal interpretation of this chapter deprives the family of locating this building with a reasonable and useful relationship to their existing home. The only alternative is to place the garage in the back yard; this forces the loss of the use of their back yard. Others in the community have the ability to build a garage and locate it sensibly with relation to their homes (see attached).

- (c) That granting this variance will not confer on the applicant any special privilege that is denied by this chapter to other lands or structures in the same district.

There is no special privilege granted by this variance.

- (d) That granting of the variance will be in harmony with the general purpose and intent of this chapter and will not be injurious to the neighborhood or otherwise detrimental to the public welfare.

Granting of this variance is in harmony with the general purpose and intent of the chapter. It is not injurious to others or detrimental. This variance is supported by the community.

- (e) In granting the variance, the Board of Appeals may prescribe appropriate conditions and safeguards in conformity with this chapter. Violation of such conditions and safeguards, when made a part of the terms under which the variance is granted, is a violation of this chapter.

All prescribed appropriate conditions and safeguards will be followed.

- (f) Under no circumstances shall the Board of Appeals grant a variance to allow a use not permissible under the terms of this chapter in the zone involved, or any use expressly or by implication prohibited by the terms of this chapter in said zone.

The proposed use of the property, low density residential, is an allowed use.

- (g) Under no circumstances shall the Board of Appeals grant a variance to a nonconforming structure for the portion of structure determined by the Zoning Administrator to be nonconforming.

No portion of the proposed structure will be nonconforming.

Furthermore,

1. The proposed use is consistent with the purpose and intent of the Comprehensive Development Plan of this chapter; and
2. The nature and intensity of the operations involved and conducted with it and the size of the site in relation to it are such that the proposed use will be in complete harmony with the appropriate and orderly development of the neighborhood in which it is proposed; and
3. The operations in conjunction with the special exception at the proposed location will not have an adverse effect such as noise, fumes, vibrations or other characteristics on neighboring properties above and beyond those inherently associated with the special exception at any other location within the zoning district; and
4. Parking will comply with the off-street parking regulations of this chapter. The entrance/exit to the property will remain unchanged and remain a maximum safety location.
5. The road system providing access to the proposed use is adequate to serve the proposed building site for the intended use.

Thank you for your time and thoughtful consideration,



Joel Rensberger, Builder

1 South Main St. Woodsboro MD 21798

301.370.4042

## PROPERTY EXPLORER

## Frederick County, Maryland

 INDICATES POSSIBLE GARAGE LOCATIONS  
FOR SURROUNDING PROPERTIES

