## City of Buckhannon 70 East Main Street Buckhannon, WV 26201



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June 12, 2017

Property Owners of Appurtenant Structures within a FEMA-designated Floodplain in Buckhannon, West Virginia

Re: **Requirements for the Installation of Appurtenant Structures** Located within a FEMA-designated Floodplain within the Corporate Limits of Buckhannon, West Virginia

To All Property Owners,

The purpose of this letter is to inform you of the minimum requirements that must be followed when the installation and/or construction of an Appurtenant Structure occurs, or has occurred, within a FEMA-designated Floodplain within the corporate limits of the City of Buckhannon (City).

As defined in Ordinance No. 353 (The Floodplain Ordinance), an Appurtenant Structure is "A structure on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. This does not include a gas or liquid storage tank." However, for the purpose of this letter, an Appurtenant Structure shall refer to a detached garage, storage shed, gazebos, picnic pavilions, boathouses, small pole barns and/or other similartype building.

Note: A complete copy of *The Floodplain Ordinance* can be located on the City's website at the following location: http://buckhannonwv.org/wordpress/wp-content/uploads/2015/02/o353.pdf.

When the installation and/or the construction of an Appurtenant Structure takes, or has taken, place within a FEMAdesignated Floodplain within the corporate limits of the City, the Property Owner shall adhere to the following requirements from ARTICLE VI - SPECIFIC REQUIREMENTS:, Section 6.1 Design and Construction Standards, Paragraph A. Basements and Lowest Floors and Paragraph C. Appurtenant Structures of *The Floodplain Ordinance*:

- Openings For all new construction, relocation, substantial improvements, and repair of substantial A.c. damage, those fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a Registered Professional Engineer or meet or exceed the following minimum criteria:
  - a) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
  - b) The bottom of all openings shall be no higher than one foot above grade.
  - c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

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- C.2.a. Structures shall be no more than 600 square feet in size and shall be valued at less than \$10,000.00.
- C.2.b. Floors shall be at or above grade on at least one side.
- C.2.c. Structures shall be located, oriented and constructed to minimize flood damage.
- C.2.d. Structures shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- C.2.f. Machinery, electric devices or appliances, and all utilities shall be located at least 18 inches above the Base Flood Elevation.
- C.2.g. The venting requirements contained in Section 6.1 (A) are applicable and shall be strictly adhered to.
- C.3. In addition, a Non-conversion Agreement shall be signed by the applicant stating that the use of the appurtenant structure or detached or attached garage shall not be changed from the use permitted, acknowledging that the structure may be subject to greater flood risk and that higher flood insurance premiums may be possible, and that a change in use may require full compliance with this ordinance. The applicant agrees to notify prospective buyers of the existence of this agreement. It shall be the responsibility of the applicant to transfer the agreement at closing to the new owner via notarized signature, a copy of all new agreements shall be provided to the Permit Officer. Failure to transfer the agreement and provide a signed copy to the Permit Officer shall subject the violator to the penalties set forth in Section 8.3 of this ordinance.

Note: A copy of the Non-Conversion Agreement is attached to this letter for your review and use.

The Property Owner needs to be aware that all of the requirements listed above shall be agreed upon and shall become part of both the Building Permit and/or Zoning applications. Failure to comply with these requirements could result in fines and/or the removal of the appurtenant structure from the property.

If you have any comments or questions regarding the contents of this letter, please contact me or Mr. Smith at your convenience to discuss this letter further. Mr. Hollen can be contacted at 304-472-1651, extension 1006 or via email at <a href="mailto:jay.hollen@buckhannonwv.org">jay.hollen@buckhannonwv.org</a> and Mr. Smith can be contacted at 304-472-1651, extension 1007 or via email at <a href="mailto:vincent.smith@buckhannonwv.org">vincent.smith@buckhannonwv.org</a>.

Sincerely

James S. Hollen, III, PE, CFM

City Engineer

Certified Floodplain Manager

Vincent R. Smith Zoning Officer

**Building Code Enforcement Officer** 

c: David W. McCauley – Mayor

Attachments: Non-Conversion Agreement

Storage Building Anchor Kit and FEMA-Compliant Flood Vent Examples

## NON-CONVERSION AGREEMENT FOR STRUCTURES IN THE 100-YEAR FLOODPLAIN

(Attached Garages, Basements, Detached Garages, Entertainment Areas, Pavilions, Storage Buildings & Sheds, Storage Rooms - Crawl Spaces Greater Than 5 Feet in Height)

Application has been made for a <b>Conditioned Permit</b> to build a				
which does not conform to the elevation requirements of the City of	of Buckhannon's Floodplain Ordinance.			
Permit Number:				
Property Owner:				
Address:				
Base Flood Elevation at the property / site:	(NGVD/NAVD)			
Deed Date and Reference (Block, Tax Map, Parcel Number, etc.):				

In consideration for the granting of a Conditioned Permit for the above structure which does not conform to the requirements of the Floodplain Ordinance of the City of Buckhannon, the Property Owner agrees to, and understands, the following:

- 1. Where applicable, the enclosed area, if permitted, shall be used solely for parking of vehicles, limited storage, or access to the building and will never be used for human habitation or living quarters without first becoming fully compliant with the Floodplain Ordinance of the City of Buckhannon in effect at the time of conversion.
- 2. That all interior walls, ceilings, and floors below the Flood Protection Elevation Level shall be unfinished and/or constructed of flood-resistant materials as identified in the Floodplain Ordinance of the City of Buckhannon.
- 3. That all mechanical, electrical, HVAC or plumbing devices shall not be installed below the Base Flood Elevation (BFE) indicated on the FEMA FIRM maps for the property upon which the structure is located (or is to be located). In some instances, as determined by the City of Buckhannon's Floodplain Manager, the installed devices shall require installation 18 inches (18") above the BFE.
- 4. That the walls of the enclosed areas below the BFE shall be equipped with at least two (2) water equalizing vents which permit the automatic entry and exit of flood water, with total openings of at least one square inch (1 in²) for every square foot (1 ft²) of enclosed area below flood level. The water equalizing vents shall be located on at least (2) different walls and the bottoms of the vents shall be no more than one foot (1 ft) above the adjacent ground elevation at all water equalizing vent locations.
- 5. That the requested structure may increase the risk to life and property, and may be subject to increased premium rates for flood insurance from the National Flood Insurance Program (NFIP).
- 6. That any variation in construction beyond what is approved & permitted by the City of Buckhannon shall constitute a violation and be abatable as such.

7.	. By receiving this permit, the Property Owner agrees to notify any prospective Buyer of the existence of the Non-Conversion agreement. It shall be the responsibility of the Property Owner to transfer this Non-Conversion Agreement at closing to the new owner via a notarized signature. It is also the responsibility of the Property Owner to forward a copy of all executed agreements to the City of Buckhannon's Certified Floodplain Manager, Zoning Officer and/or Building Code Enforcement Officer. Failure to notify, transfer and forward the Non-Conversion Agreement to the appropriate parties at the City of Buckhannon shall subject the Property Owner to penalties as set forth in the Floodplain Ordinance.						
8.	That this Non-Conversion Agree Building Code Official, the Zo inspect and enforce the provision	oning Official ar	nd/or the C	Certified Floodplain	Manager the ability to		
Pro	operty Owner's Signature	Date		Printed Name			
Pro	operty Owner's Signature	Date		Printed Name			
Туј	pe of Identification:			_			
Wi	tness my hand and official seal, th	nis	day of _		, 20		
No	tary Public Signature			Notary Seal			

Note: This Non-Conversion Agreement must be used whenever a permit to build or substantially improve an enclosed storage building / shed, parking structure, garage, pavilion or other building access structures is requested *within* the 100-Year Floodplain below the Base Flood Elevation. This Non-Conversion Agreement must be signed whenever permits are to be issued (for example, garages and accessory / appurtenant structures and foundation enclosures which exceed 6 feet in height). This Non-Conversion Agreement must be recorded as a deed restriction by the County Clerk of Upshur County prior to either the Certificate of Occupancy and/or the Certificate of Use being issued.

Note: The phrase "Base Flood Elevation" is defined as the Base Flood Elevation (BFE) as depicted on an official FEMA Flood Insurance Rate Map (FIRM). The BFE may be increased by the City of Buckhannon's adoption of a higher elevation standard, which currently includes 18" of "Freeboard" above the indicated BFE.

#### Earth Anchor (AK4)

#### Description:

- Four 30" heavy duty steel augers
- 60' of cable
- Four cable clamps



Anchor Kit #	Fits these sheds	Download Manual	Buy Now
AK4	All sheds anchored to earth	AK4 manual	Your Price \$49.99

Two AK4 kits are required for sheds larger than 10'x9'

### Example of Storage Building Anchoring Kit





Galvanized Hardware Cloth Wire ...

Example of Galvanized Hardware Cloth

Example of FEMA-Compliant Flood Vent

# FLOOD SOLUTIONS™ MODEL "FS-HEX"

# FEMA COMPLIANT, ICC CERTIFIED ENGINEERED FLOOD VENTS



#### FEMA Compliant Engineered Flood Vents meet FEMA requirements when installed properly.

- Use at least 2 flood vents per enclosed area below flood grade, installed on at least two separate walls.
- The bottom of the flood vent opening must not be higher than 12 inches above the grade.
- At least 1 square inch of engineered opening for every 1 square foot of enclosed space.
- ICC-ES CERTIFIED VENT

Qty	Model	Minimum Opening Required	Tip to Tip Dimensions	Engineered Opening Covers
	FS-1608-HEX	16" Wide x 8" High	18-1/2"W x 10-1/2"H	110 sq ft

Frame: ALUMINUM; .063" minimum thickness, with 6 square openings in front face, each opening in the vent is ¼" hexagon

<u>Finish</u>: each vent has a satin sanded finish. This finish may be field painted.



#### FLOOD SOLUTIONS, LLC. **One Industrial Park Drive**

Bldg. 27 Pelham NH, 03076 Toll Free: 1-800-325-9775 In NH: 603-595-5222 Fax: 603-595-4778

www.floodsolutions.com info@floodsolutions.com

PROJECT	
CONTRACTOR	
DATE	