



FLOOD HAZARD PERMIT APPLICATION

Property Tax Account Number(s): _____

Section: _____ Township: _____ Range: _____

Site Address: _____

APPLICANT: _____

Mailing Address: _____ City, Zip: _____

Phone: _____ Fax: _____ Email: _____

PROPERTY OWNER: _____

Mailing Address: _____ City, Zip: _____

Phone: _____ Fax: _____ Email: _____

CONTACT PERSON: _____

Mailing Address: _____ City, Zip: _____

Phone: _____ Fax: _____ Email: _____

Associated File Number(s) _____

Detailed Project Description: _____

Construction Dates: (Begin) _____ (End) _____

Name of Water Body and DFIRM panel number: _____

Flood Hazard Area Designations (circle one):

Floodway Fringe Floodway Density Fringe Coastal

* Floodway location. Generally, development is not allowed in floodway areas. Limited development can occur only if consistent with Sections 30.65.220 and 30.65.230 SCC.

** **Density Fringe location.** The development criteria of Sections 30.65.250, 30.65.255, and 30.65.270 SCC must be satisfied. Information necessary to demonstrate compliance with these sections must be submitted with this application, see below.

To be completed only if Density Fringe location:

- a. Total area of subject property: _____ square feet
- b. Total area of proposed development: _____ square feet
- c. Width of subject property at development location: _____
- d. Width of proposed development: _____
- e. Is the proposed development designed and oriented to be parallel with the known flow of the floodwaters?
Yes _____ No _____

Application Requirements

- _____ 1. Completed flood hazard permit application form
- _____ 2. Site plan survey demonstrating the existing ground elevations at the four corners of the proposed structure or development area
- _____ 3. Floodplain Habitat Assessment demonstrating compliance with the 2008 Puget Sound Biological Opinion
- _____ 4. Structural plans for the building if there is no associated building permit application submitted.

ADDITIONAL REQUIREMENTS DURING CONSTRUCTION

Elevation Certificate

If a permit can be issued for a proposed structure, it will be the responsibility of the applicant to provide certification by a registered professional land surveyor on the form provided by Snohomish County Planning and Development Services (PDS) as to the actual elevation of floodproofing of any permitted structure. This will be required prior to the applicable construction inspections specified by the certification form. A copy of the certification must be submitted to PDS.

In signing this application, the landowner(s) or agent hereby grants Snohomish County Planning & Development Services the right to enter the above described location to inspect the work proposed, in progress, or work completed.

I hereby affirm and certify, under penalty of perjury, that I am one of the owners or am under contract with the owners, and I believe that the above information and/or statements are true in all respects to the best of my knowledge.

SIGNATURE (Check one): Applicant Owner Agent

Date Signed

SNOHOMISH COUNTY PLANNING & DEVELOPMENT SERVICES

FLOOD HAZARD SITE PLAN REQUIREMENTS

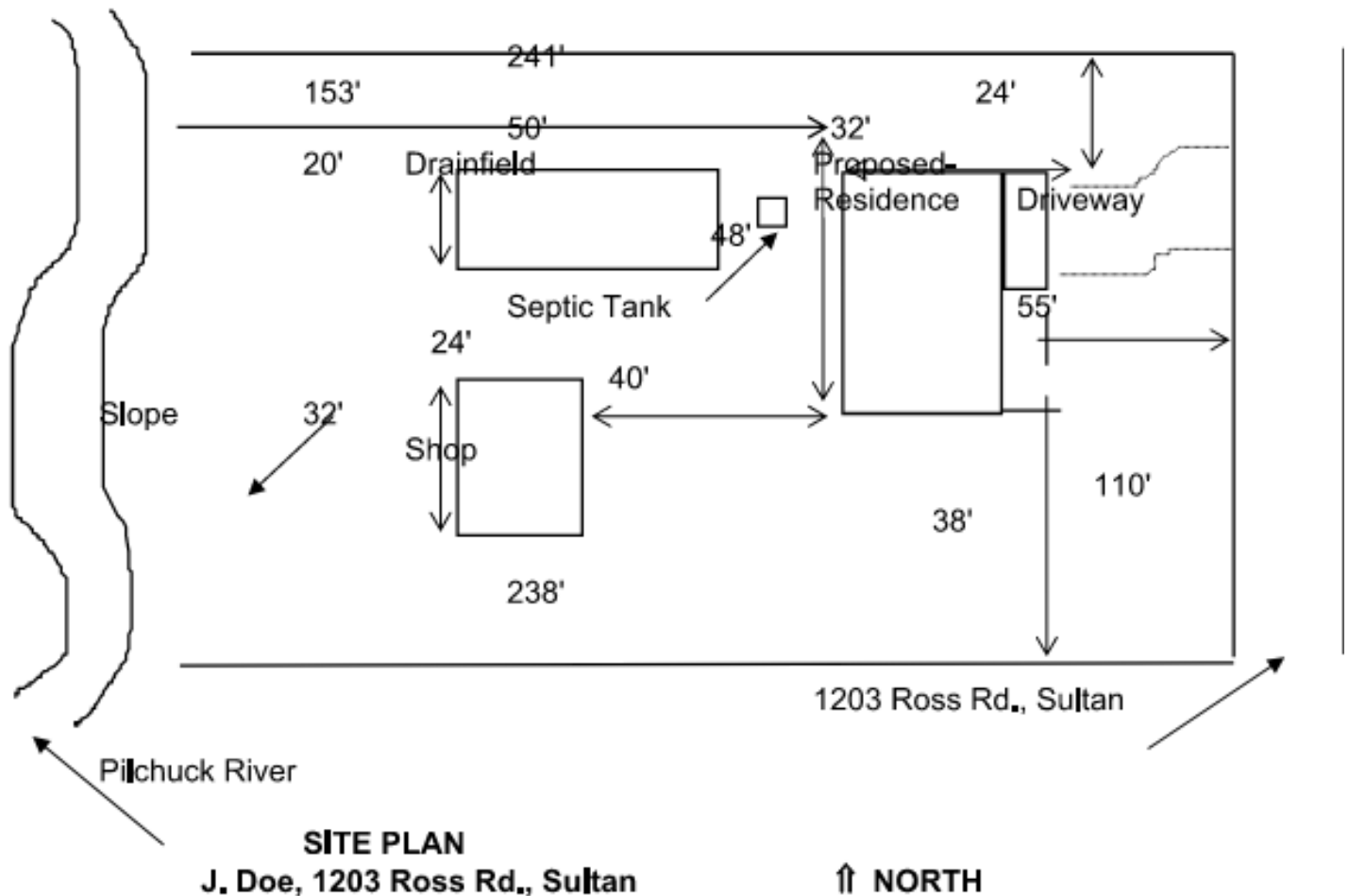
A SITE PLAN IS AN ACCURATE AND DETAILED MAP OF YOUR PROPERTY:

It shows the size, shape, and special features of your property, and the size and location of any buildings or other improvements to the property. Site plans show what currently exists on your property, and any changes or improvements you are proposing to make.

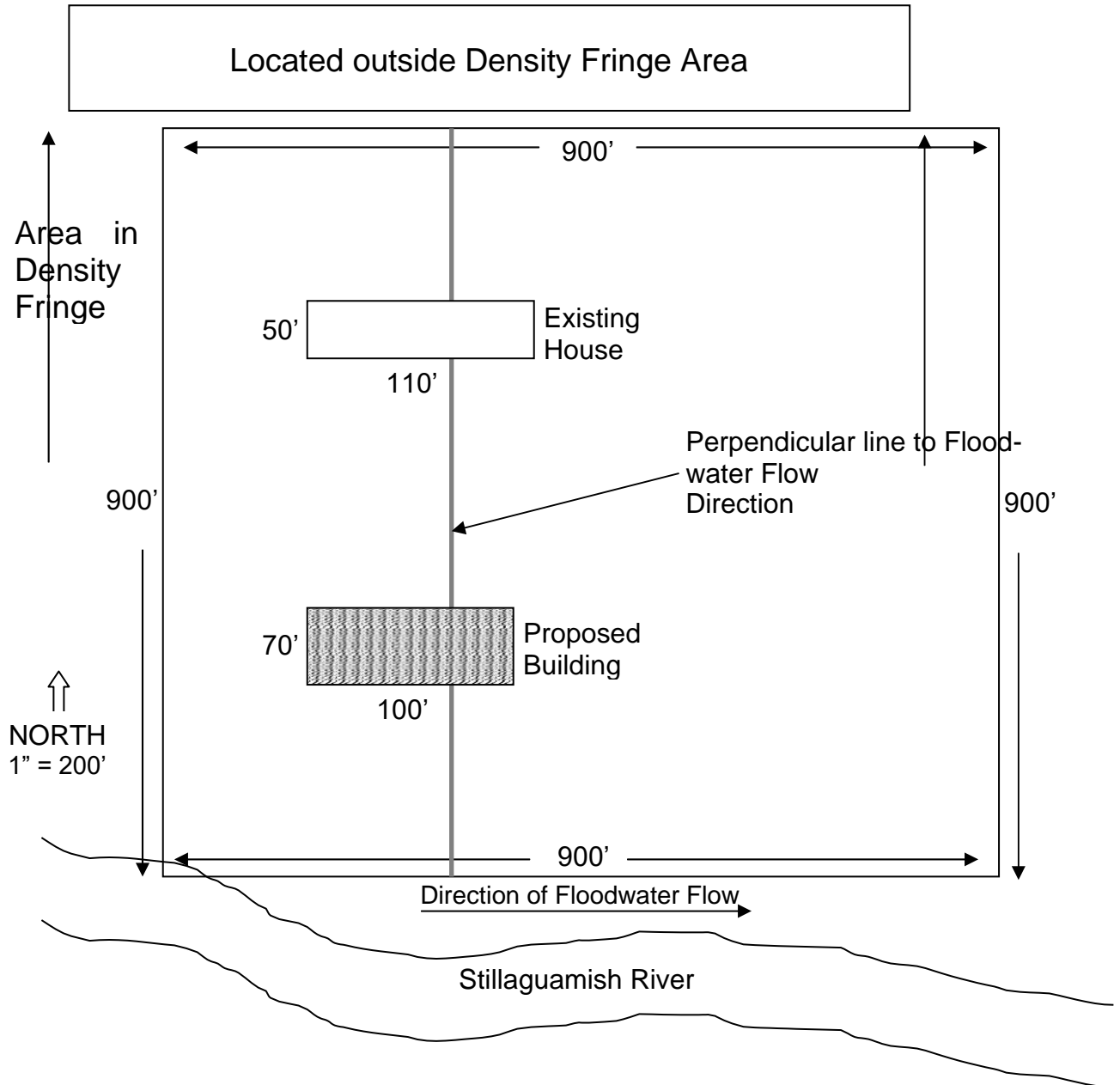
A SITE PLAN MUST CONTAIN THE FOLLOWING INFORMATION:

1. Name of property owner, north arrow, and scale (not less than 1: = 50').
2. All property lines, easements, and their dimensions.
3. Names of adjacent roads, location of driveways.
4. Location, size, and shape of buildings existing and proposed.
5. Distance of proposed building from ordinary high-water mark (if applicable), from edge of County road, and from side lot lines.
6. Location of any proposed propane tanks
7. Location of creeks, lakes, rivers, waterfront; and location of dikes.
8. Location and dimensions of existing or proposed sewage systems.
9. Dimensions and depth of any fill on site.
10. A stamped signed survey from a licensed land surveyor showing the existing ground elevations at the four corners of the building.
11. Proposed ground elevations at the four corners of the building if the proposed structure will be elevated on fill.
12. **Density fringe area only:** in addition to a site plan with the elements listed above, a site plan suitable for recording must be submitted using the template from page 6. See next page for sample site plan
 - Maximum lot coverage calculations
 - Maximum blockage calculations
 - Length of perpendicular line to flood water flow direction

SAMPLE SITE PLAN



SAMPLE SITE PLAN FOR DENSITY FRINGE AREA



Maximum Allowable Density Lot Coverage (2%) (SCC 30.65.250)

Total Square Feet in Density Fringe Area:		810,000 sq. ft.
House Size:		5,500 sq. ft.
Proposed Building Size:		7,000 sq. ft.
<u>(See Note*)</u>		<u>12,500 sq. ft.</u>
*Note: Maximum Allowable is 2% of the Total Square Feet (2% x 810,000 = 16,200 sq. ft. 12,500 sq. ft. is well within that range)		

Maximum Allowable Lot Obstruction (15%) (SCC 30.65.255)

Horizontal Perpendicular Line is:	900 feet
Width of House:	50 feet
Width of Proposed Building:	70 feet
<u>15% x 900 =</u>	<u>120 feet</u>

APPLICANT:
PROJECT #:
TAX ACCT#:

SITE PLAN:

_____ OF _____



Representation on this site plan may be approximations only and should not be used for purposes other than for determining general density fringe and special flood hazard allowances.

APPROVED SNOCO PDS DATE OWNER(S) DATE

FLOOD HAZARD CONSTRUCTION STANDARDS

The purpose of this handout is to outline the information required on building plans for new or substantially improved structures in flood hazard areas to assure the utilization of flood-resistant materials.

Snohomish County code 30.65.110 requires that all new construction and substantial improvements to be anchored, constructed using materials and utility equipment resistant to flood damage, enclosed area below the lowest floor used solely for parking or building access.

Use of flood resistant materials

The Federal Emergency Management Agency (FEMA) guidelines for flood resistant materials are contained in Technical Bulletin 2. This publication is available for review or reproduction upon request.

Areas below the base flood elevation (BFE) are routinely constructed entirely out of concrete, which is considered a flood resistant material. It is also a common building practice to frame up from a concrete stem wall with wood construction to create a garage/storage space below the elevated first floor. Since garage spaces typically utilize sheetrock to achieve the necessary fire separation, construction of this type results in the use of materials subject to flood damage.

To comply with FEMA's guidelines for flood resistant materials as listed in Technical Bulletin 2, **the use of untreated wood and sheetrock to cover wall members below the BFE is prohibited.** The preferred design alternative (other than concrete walls) will be the use of pressure treated heavy timber construction (6"x10" horizontal, 8"x8" vertical) and pressure treated frame members. The ceiling can be protected with sheetrock if the first floor above the protected ceiling is one foot above the BFE and the sheetrock is less than one foot below that elevation. Cement board may be used as a substitute for sheetrock. Siding below the BFE shall utilize the acceptable materials listed in Technical Bulletin 2.

Required elevation

All construction below the BFE is susceptible to flooding and must consist of flood-resistant materials. The BFE will be established by this department and conveyed to the applicant for incorporation into the building plans. To adequately determine if flood-resistant materials are required, proponents of new construction in flood prone areas shall provide a survey of existing ground elevations of the four corners of the proposed development and the proposed ground elevations of the proposed development. The BFE shall be shown on the elevation drawings for the proposed structure. The BFE will be established by this department and conveyed to the applicant for incorporation into the building plans.

Basements

SCC 30.65.120 requires that the lowest floor, including basement and all utilities, be elevated one foot above the BFE.

The National Flood Insurance Program defines a basement as "any area of the building having its floor subgrade (below ground level) on all sides."

Proponents of new construction in flood prone areas will need to be aware of final interior and exterior grade levels of the proposed structure to avoid having to elevate basements or to have crawl spaces rated as basements for insurance purposes.

Openings to equalize hydrostatic flood forces

SCC 30.65.120(2)(d) requires that "fully enclosed areas below the lowest floor are prohibited or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit floodwaters." The minimum criteria are found at SCC 30.65.120(2)(d) and is generally consistent with standard foundation venting requirements as to size. These vents are to be located no higher than one foot above the interior and exterior grade and must provide for the automatic entry and exit of floodwaters.

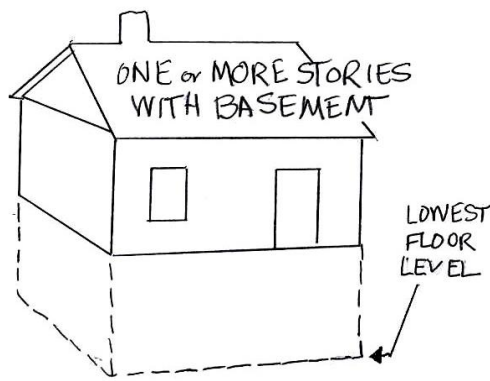
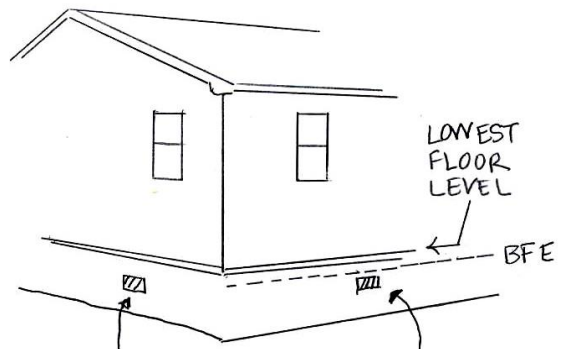
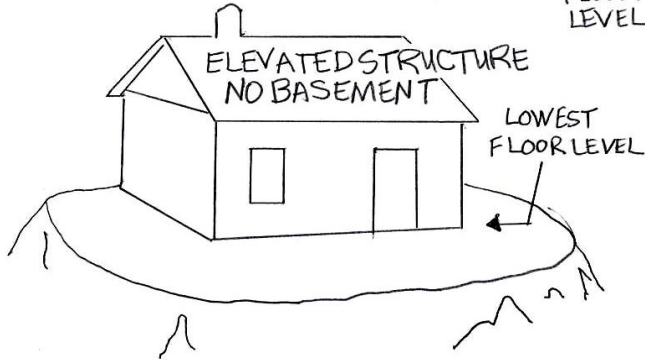
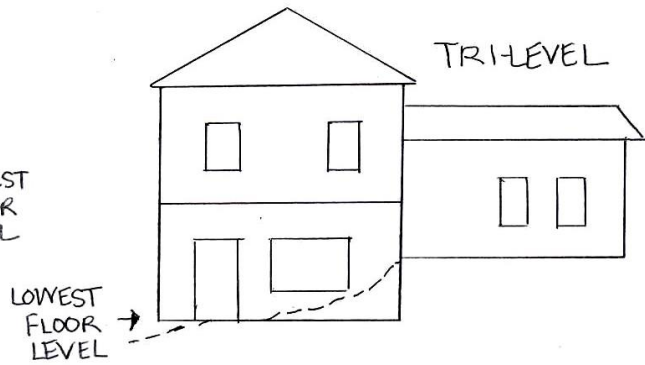
Electrical gear and equipment

SCC 30.65.120(1) requires that "all electrical, heating, ventilation, plumbing and air conditioning equipment that is permanently affixed to a structure and which may be subject to floodwater damage shall be elevated a minimum of one foot above the BFE or higher (unless within an approved watertight structure)." Electrical outlets, with or without GFI, shall be one foot above BFE.

FLOOD HAZARD REQUIREMENTS

Determining Lowest Floor Level

(Residential Structures)

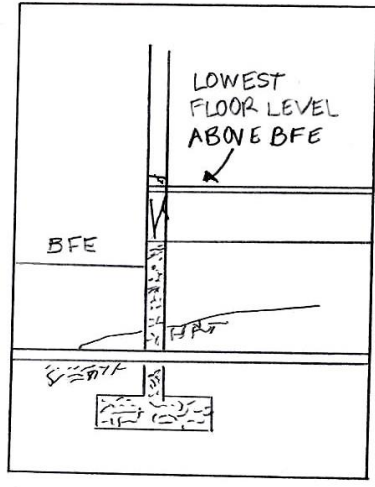


OPENINGS TO ALLOW ENTRY AND EXIT OF FLOODWATERS

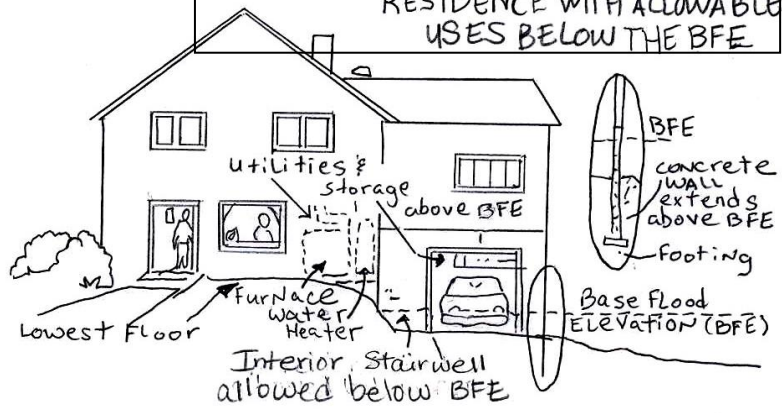
A minimum of 2 openings with total area not less than 1 square inch for every square foot enclosed area.

Bottom of all openings shall be no higher than 1 foot above grade.

Openings may be equipped with screens provided they permit entry and exit of floodwater.



RESIDENCE WITH ALLOWABLE USES BELOW THE BFE



About Mandatory Purchase of Flood Insurance Requirement

NFIP: This community participates in the National Flood Insurance Program (NFIP), which makes federally backed flood insurance available for all eligible buildings, whether they are in a floodplain or not. Flood insurance covers direct losses caused by surface flooding, including a river flowing over its banks, a lake or ocean storm, and local drainage problems.

The NFIP insures buildings, including mobile homes, with two types of coverage: building and contents. Building coverage is for the walls, floors, insulation, furnace, and other items permanently attached to the structure. Contents coverage may be purchased separately, if the contents are in an insurable building.

Mandatory Purchase Requirement: The Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 made the purchase of flood insurance mandatory for federally backed mortgages on buildings located in Special Flood Hazard Areas (SFHAs). It also affects all forms of Federal or Federally related financial assistance for buildings located in SFHAs. The SFHA is the base (100-year) floodplain mapped on a Flood Insurance Rate Map (FIRM). It is shown as one or more zones that begin with the letter "A" or "V."

The rule applies to secured mortgage loans from such financial institutions as commercial lenders, savings and loan associations, savings banks, and credit unions that are regulated, supervised, or insured by Federal agencies such as the Federal Deposit Insurance Corporation and the Office of Thrift Supervision. It also applies to all mortgage loans purchased by Fannie Mae or Freddie Mac in the secondary mortgage market.

Federal financial assistance programs affected by the laws include loans and grants from agencies such as the Department of Veterans Affairs, Farmers Home Administration, Federal Housing Administration, Small Business Administration, and the Department of Homeland Security's Federal Emergency Management Agency (FEMA).

How it Works: Lenders are required to complete a Standard Flood Hazard Determination (SFHD) form whenever they make, increase, extend or renew a mortgage, home equity, home improvement, commercial, or farm credit loan to determine if the building or manufactured (mobile) home is in an SFHA. It is the Federal agency's or the lenders responsibility to check the current Flood Insurance Rate Map (FIRM) to determine if the building is in an SFHA. Copies of the FIRM are available for review in most local government building or planning departments. Lenders may also have copies or they use a flood zone determination company to provide the SFHD form.

If the building is in a SFHA, the Federal agency or lender is required by law to require the recipient to purchase a flood insurance policy on the building. Federal regulations require building coverage equal to the amount of the loan (excluding appraised value of the land) or the maximum amount of insurance available from the NFIP, whichever is less. The maximum amount of available for a single-family residence is \$250,000. Government sponsored enterprises, such as Freddie Mac and Fannie Mae, have stricter requirements.

The mandatory purchase requirement does not affect loans or financial assistance for items that are not covered by a flood insurance policy, such as vehicles, business expenses, landscaping, and vacant lots. It does not affect loans for buildings that are not in an SFHA, even though a portion of the lot may be. While not mandated by law, a lender may require a flood insurance policy, as a condition of a loan, for a property in any zone on a FIRM.

If a person feels that a SFHD form incorrectly places the property in the SFHA, he or she may request a Letter of Determination Review from FEMA. This must be submitted within 45 days of the determination. More information can be found at <https://www.fema.gov/flood-maps/change-your-flood-zone>

For information on SFHAs and FIRM's contact County staff at:

Planning & Development Services 425-388-3311 –or–
Public Works, Surface Water Management 425-388-3464