



FIGURE 18: Special Flood Hazard Area Diagram

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CHAPTER 3 OVERLAY DISTRICTCS

ARTICLE F. FLOOD HAZARD OVERLAY DISTRICT

SECTION:

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8-3F-1: **PURPOSE:** The purpose of this article to protect the public health, safety, and welfare by providing regulations to:

- A. Ensure that new development in special flood hazard areas does not aggravate existing flooding conditions.
- B. Ensure that new or rebuilt structures within special flood hazard areas are designed and constructed to resist flood damages.
- C. Prohibit activities that violate the regulations of the national flood insurance program.

8-3F-2: **AUTHORITY:** The Legislature of the State of Idaho in I.C. 46-1020 through I.C. 46-1024, authorized local government units to adopt a floodplain map and floodplain management ordinance that identify floodplains and that set forth minimum development requirements in

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floodplains that are designed to promote the public health, safety, and general welfare of their citizenry.

8-3F-3: **APPLICABILITY:** The regulations of this article shall apply to "development" as defined in section 8-3F-5 of this article, within all special flood hazard areas identified by one or more of the following:

- A. The Federal Insurance and Mitigation Administration in a scientific and engineering report entitled "The Flood Insurance Study For Ada County, Idaho," revised February 19, 2003, with accompanying flood insurance rate maps and any subsequent revisions thereto, or digital flood insurance rate maps. Such study is adopted by ordinance 391 on file at the Ada County Development Services Department, or as hereinafter amended.
- B. Foothill or other hillside tributary floodways as herein defined.
- C. Any area determined by the floodplain administrator to be a hazard to public health, safety, and welfare due to flooding, including, but not limited to, "development," as herein defined, necessary to comply with existing state or local health, sanitary, or safety code requirements.

8-3F-4: **ADMINISTRATION:**

- A. Floodplain Administrator Responsibilities: The floodplain administrator is appointed to administer and implement this article and shall have the following responsibilities in all special flood hazard areas:
 - 1. Review all new development to determine if it is located in a special flood hazard area, if it is reasonably safe from flooding, and that it complies with the regulations of this article.
 - 2. Review all development permits in special flood hazard areas to assure that all necessary permits have been received from governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
 - 3. Review zoning certificates, when required, for those structures that are to be constructed or modified in compliance with the regulations of this article and other applicable regulations of this title.
 - 4. Obtain, review, and reasonably use any base flood elevation and floodway data available from federal, state, or other sources in order to administer this article when base flood elevation data has not been provided.

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5. Collect and maintain all records pertaining to the regulations of this article for public inspection including records of all appeal actions and variances, elevation certificates, floodproofing certificates, and all other records required by this article and by federal regulations.
6. Notify affected jurisdictions and the Idaho Department of Water Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the federal insurance administration; and require that maintenance is provided within the altered or relocated portion of such watercourse so that the flood carrying capacity of the watercourse is not diminished.
7. Submit annual reports and other reports to the Federal Insurance Administration, as required or as requested.
8. Where base flood elevation data is provided throughout the flood insurance study, or as required elsewhere herein, obtain and file a properly completed elevation certificate from the applicant, certified by a professional engineer or land surveyor licensed in the State of Idaho, showing the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
9. Obtain a properly completed floodproofing certificate from the applicant for all new or substantially improved floodproofed structures.
10. Ensure building permits for new construction, new development, or substantial improvement of structures are in compliance with the regulations of this article.
11. Submit letters of community acknowledgment for requested letters of map revision to the appropriate federal insurance administration agency to fulfill obligations specified in the national flood insurance program regulations.
12. Prior to approval of a floodplain development permit, acquire advice from the county engineer on the following matters:
 - a. Review of field surveys and technical information submitted by any applicant for new development.
 - b. Review of all new construction of check dams to ensure the safety of persons and property that could be affected by the construction of the check dam.
 - c. Interpretation of the exact location of special flood hazard area boundaries.

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d. Review and approval of flood studies and revisions.

- B. Interpretation: All of the regulations of this article shall be considered as minimum requirements, shall be considered liberally construed in favor of the governing body and shall not be deemed to limit or repeal any other powers granted under state statutes.
- C. Warning and Disclaimer: The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased due to artificial or natural causes. This article does not imply that property outside the identified special flood hazard areas will be free from flooding or flood damages, or that uses permitted within the identified special flood hazard areas will be free from flooding or flood damages. This article shall not create liability on the part of Ada County, any officer or employee thereof, or the federal insurance administration, for any flood damages that result from reliance on this article or any administrative decision lawfully made hereunder.

8-3F-5: **DEFINITIONS:** For the purposes of this article, the terms, as herein defined, shall be used in the administration of this article:

A ZONE: A special flood hazard area delineated on the flood insurance rate maps that is subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no base flood elevations or flood depths are shown.

AE ZONE: A special flood hazard area delineated on the flood insurance rate maps that is subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. Base flood elevations are shown.

AH ZONE: A special flood hazard area delineated on the flood insurance rate maps that is subject to inundation by 1-percent-annual-chance shallow flooding, usually in the form of a pond, where average depths are between one (1) and three feet (3'). base flood elevations derived from detailed hydraulic analyses are shown at selected intervals in this zone.

AO ZONE: A special flood hazard area delineated on the flood insurance rate maps that is a river or stream hazard area and subject to inundation by 1-percent-annual-chance shallow flooding, usually in the form of sheet flow, where average depths are between one (1) and three feet (3'). Average flood depths derived from detailed hydraulic analyses are shown in this zone.

AREA OF SHALLOW FLOODING: An area within the flood fringe shown on the flood insurance rate map as an AO or an AH zone; and where the base flood depths

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range from one (1) to three feet (3'), a clearly defined channel does not exist, the path of flooding is unpredictable and indeterminate, and velocity flow may be evident.

BASE FLOOD: The flood having a one percent (1%) chance of being equaled or exceeded each year. Also known as the “Regulatory Flood.”

BASE FLOOD ELEVATION (BFE): The water surface elevation during the base flood (see figure 18 in section 8-1A-2). The base flood elevation is depicted on the flood insurance rate map to the nearest foot and in the flood insurance study to the nearest 0.1 foot.

BASEMENT: Any area of a structure having its floor sub grade (below ground level) on all sides, including a crawlspace.

CHECK DAM: A structure erected perpendicular to the direction of flow of floodwaters in a foothill or other hillside tributary floodplain, and which does not exceed ten feet (10') in height or fifty (50) acre-feet of storage capacity and is constructed for the purpose of reducing the velocity of floodwaters or reducing flood flows downstream or both. For the purposes of this article, energy dissipating devices shall be considered check dams.

CONDITIONAL LETTER OF MAP REVISION (CLOMR): The Federal Emergency Management Agency’s comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the base flood elevations, or the special flood hazard area. A conditional letter of map revision does not revise a national flood insurance program map, but indicates whether a project, if built as proposed, would be recognized by the Federal Emergency Management Agency.

D ZONE: A special flood hazard area delineated on the flood insurance rate map that has possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

DEVELOPMENT: Any manmade change to improved or unimproved real estate including, but not limited to, the construction of buildings, structures or accessory structures, or the construction of additions or substantial improvements to buildings, structures or accessory structures; the placement of mobile homes; filling, mining, dredging, grading, paving, excavation or drilling operations; storage of equipment and materials; and the deposition or extraction of materials; specifically including the construction of dikes, berms and levees. The term ‘development’ does not include the operation, cleaning, maintenance or repair of any ditch, canal, lateral, drain, diversion structure or other irrigation or drainage

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facility that is performed or authorized by the owner thereof pursuant to lawful rights and obligations.

DIGITAL FLOOD INSURANCE RATE MAP (DFIRM): A digital representation of a flood insurance rate map within an electronic mapping application depicting both the special flood hazard areas and the risk premium zones applicable within Ada County.

ELEVATION CERTIFICATE: A Federal Emergency Management Agency form used to provide elevation information necessary to ensure compliance with this article, to determine the proper insurance premium rate, and/or to support a request for a letter of map amendment or revision to flood insurance rate maps.

FLOOD ELEVATION STUDY: An examination, evaluation and determination of flood hazards, flood profiles, floodway boundaries and water surface elevation of the base flood.

FLOOD FRINGE: The area between the floodway and the one-hundred year (100 Yr.) floodplain boundary including the AO and A zones where no floodway is identified (see figure 18 in section 8-1A-2).

FLOOD INSURANCE RATE MAP (FIRM): The official map, as amended and/or revised from time to time, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable within Ada County.

FLOOD INSURANCE STUDY (FIS): The official report provided by the Federal Emergency Management Agency evaluating flood hazards and containing flood profiles, floodway boundaries and water surface elevation of the base flood.

FLOOD OR FLOODING: A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland water and/or the unusual and rapid accumulation of runoff of surface waters.

FLOODPLAIN: Any land area susceptible to being inundated by flood waters (see figure 18 in section 8-1A-2).

FLOODPLAIN ADMINISTRATOR: The director of the Ada County Development Services Department or staff member appointed to administer and implement this article.

FLOODPROOFING: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

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FLOODPROOFING CERTIFICATE: A Federal Emergency Management Emergency form used to certify a floodproofing design for a nonresidential structure that is being floodproofed as an alternative to elevating the structure to or above the base flood elevation.

FLOOD PROTECTION ELEVATION (FPE): An elevation that corresponds to the elevation of the one percent (1%) chance annual flood (the Base Flood), plus any increase in flood elevation due to floodway encroachment. The flood protection elevation for Ada County is one foot (1') above Base Flood Elevation (BFE).

FLOODWAY: See definition of "Regulatory Floodway."

FOOTHILL OR HILLSIDE TRIBUTARY FLOODPLAIN: A watercourse or drainage way located in the foothills or other hillside tributary that collects and carries waters draining from an area of greater than ten (10) acres in size, excluding an alluvial fan where no floodplain has been identified.

HIGHEST ADJACENT GRADE: The highest natural elevation of the ground surface prior to development or construction next to the proposed walls of a structure.

HISTORIC STRUCTURE: Any structure that is listed individually in the national register of historic places or preliminarily determined as meeting the requirements for individual listing in the national register.

LETTER OF MAP AMENDMENT (LOMA): An official amendment to a National Flood Insurance Program map, which establishes a property's location in relation to the special flood hazard area.

LETTER OF MAP REVISION (LOMR): A modification to a National Flood Insurance Program map typically based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the special flood hazard area.

LETTER OF MAP REVISION BASED ON FILL (LOMR-F): An official revision by FEMA of a community's effective National Flood Insurance Program map to remove structure(s) or lot(s) from the floodplain when they have been elevated above the base flood elevation by the placement of fill.

LOWEST FLOOR: The lowest floor of the lowest enclosed area (including basement and crawlspace). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area, is not considered a structure's lowest floor; *Provided*, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this article.

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MANUFACTURED HOME: A structure, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term “Manufactured Home” does not include a “Recreational Vehicle.”

NEW CONSTRUCTION: Structures for which the "Start of Construction" commenced on or after the effective date of this article. Additions, repairs, or reconstruction of an existing structure is not considered new construction until the cost of such work makes it a "Substantial Improvement," as herein defined.

NONRESIDENTIAL STRUCTURE: A building, other than a residential structure or dwelling, or parts thereof, that is open to the public or for private use. The term nonresidential structure includes, but is not limited to: structures used for places of assembly, education, business, maintenance, storage, manufacturing, and government.

RECREATIONAL VEHICLE: A vehicle that is: (a) Built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) Designed to be self-propelled or permanently towed by a light duty truck; and (d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOODWAY: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation (see figure 18 in section 8-1A-2).

RESIDENTIAL STRUCTURE: A building used as a dwelling for one or more persons. The term residential structure includes, but is not limited to: houses, family daycare homes, group daycare facilities, apartment buildings, lodging homes, dormitories, hotels, motels, hospitals, sanitariums, and nursing homes. The term residential structure also includes accessory use areas used in conjunction with, and an integral part of, a residential structure.

SPECIAL FLOOD HAZARD AREA (SFHA): The areas in Ada County that are subject to a 1 % or greater chance of flooding in any given year. These areas include: 1, floodplains such as the A, D, AE, AH and AO Zones; 2, foothill or hillside tributary floodplain; and 3, other areas determined by floodplain administrator to be a hazard to public health, safety, and welfare due to flooding.

START OF CONSTRUCTION: The date a building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement, or substantial improvement, was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work

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beyond the state of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory structures, such as garages or sheds not occupied as dwelling units or not part of the main structure.

STRUCTURE: A walled and roofed building including a gas or liquid storage tank, or any other constructed artifice that is principally aboveground, as well as a manufactured home and a fence.

SUBSTANTIAL DAMAGE (SD): 1. Damage of any origin sustained by a structure whereby the cost to restore the structure to its before-damaged condition would equal or exceed fifty percent (50%) of its assessed value before the damage occurred, OR 2. Flood-related damage sustained by a structure on two (2) separate occasions during a ten-year (10 Yr.) period for which the cost to restore the damage at the time of each such flood event, on the average, equals or exceeds twenty five percent (25%) of the assessed value before the damage occurred.

SUBSTANTIAL IMPROVEMENT (SI): Any reconstruction, rehabilitation, addition, or other improvement of a structure for which: 1, The cost equals or exceeds fifty percent (50%) of the assessed value of the structure before the "Start of Construction" of the improvement; or 2, The cost, on the average, equals or exceeds twenty five percent (25%) of the assessed value of the structure before the "Start of Construction" on two (2) separate occasions during a ten-year (10 Yr.) period. Substantial improvements within or above a structure require the entire building to be elevated. If a substantial improvement adds a room or rooms outside the footprint of the existing building, only the addition is required to be elevated. This term also includes structures which have incurred "Substantial damage," regardless of the actual repair work performed. The term does not, however, include the following:

Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the development services department, and which are the minimum necessary to assure safe living conditions, or

Any alterations of a "Historic Structure," provided that the alteration will not preclude the structure's continued designation as a "Historic Structure."

8-3F-6: **PROCESS:**

- A. Approval: Prior to the commencement of any development including the placement of a manufactured home within any special flood hazard area, the property owner shall obtain approval of a floodplain permit and comply with the

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- applicable general regulations and standards identified in subsections 8-3F-7 and 8-3F-8 of this article.
- B. Application: An application and fees, as set forth in chapter 7, article A of this title, shall be submitted to the development services department on forms provided by the department along with all required information identified on the applicable floodplain checklist. The floodplain administrator will review the request and determine if additional information, certificates, or studies are required prior to commencement of development or manufactured home placement.
 - C. Permit Duration: The approval of a floodplain permit shall be limited to a two (2) year period in which the applicant and/or property owner shall complete the proposed improvements to the satisfaction of the floodplain administrator.
 - D. Certificates and Studies: An applicant and/or owner may be required to submit the following certifications and/or studies with the floodplain application, or subsequent to floodplain application submission:
 - 1. Elevation Certificate: If the elevation of a structure is required to be certified in accord with specific standards identified in section 8-3F-8 of this article, a completed construction drawings elevation certificate signed by a professional engineer or surveyor licensed in the State of Idaho shall be submitted and approved by the floodplain administrator prior to issuance of any building permit. Once the lowest floor of the proposed structure or substantial improvement is constructed, a completed finished construction elevation certificate signed by a professional engineer or surveyor licensed in the State of Idaho shall be submitted and be approved by the floodplain administrator prior to issuance of a certificate of occupancy and/or prior to final building permit inspection approval.
 - 2. Floodproofing Certificate: If certification is required to demonstrate that a structure has been floodproofed, documentation demonstrating compliance with specific standards identified in section 8-3F-8 of this article, shall be submitted with the floodplain application and approved by the floodplain administrator prior to the issuance of a building permit, and/or zoning certificate. A completed floodproofing certificate, prepared by a professional engineer licensed in the State of Idaho, shall be submitted and be approved by the floodplain administrator prior to issuance of a certificate of occupancy or prior to final building permit inspection approval.
 - 3. Flood Studies:
 - a. Flood Elevation Study: If required by the specific standards identified in this article, a flood elevation study, prepared by a professional engineer licensed in the State of Idaho, must be approved by the floodplain

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administrator prior to the commencement of any work. The study shall be submitted electronically and paper form to include: 1, a title; 2, a table of contents; 3, the location and description of the property; 4, a scope of work; 5, analysis and documentation of methods and procedures to determine the flood elevation and any additional information required by this article; 6, a discussion of the proposed use in the existing floodplain and the surrounding land uses; 7, a discussion of floodplain regulation compliance; and 8, all other items identified on the floodplain checklist as may be applicable and/or as may be required by the floodplain administrator.

- b. No-rise Analysis and Certification: If no-rise analysis and certification is required by any of the specific standards contained in this article, an analysis and certification shall be prepared by a professional engineer licensed in the State of Idaho and shall be submitted with the floodplain application. The documentation shall include all items outlined in section 8-3F-6.D.3.A, Flood Elevation Study, a completed Floodplain Checklist, along with all other supporting technical data which confirms that the proposed work will not result in an increase of the base flood elevation. The analysis and certification must be approved by the floodplain administrator prior to commencement of any work.
4. LOMC: If a change or revision of a flood insurance rate map is warranted by any of the specific standards identified in this article, the applicant and/or owner shall submit a request to FEMA for a Letter of Map Change. A LOMC reflects an official revision/amendment to an effective Flood Insurance Rate Map. The applicant and/or owner may submit the request to FEMA online themselves or retain a professional engineer licensed in the State of Idaho to prepare and submit the amendment and/or revision request to the federal emergency management agency (FEMA). A copy of the official amendment and/or revision letter signed by FEMA shall be submitted to the floodplain administrator in accord with the timeframes specified in the specific standards contained in this article.

8-3F-7: **GENERAL REGULATIONS:**

- A. The following general regulations are applicable to all development within any special flood hazard area:
 - 1. Minimize Flood Damage Potential: Methods and practices shall be used that minimize flood damage potential to all new development and that do not increase the flood damage potential to other properties.
 - 2. Flood Resistant Materials: All new development shall use materials and utility equipment resistant to flood damage.

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3. Anchoring: All new construction and substantial improvements of structures shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
4. Drainage: Drainage practices that minimize exposure to flood hazards and that maintain the original or historic drainage patterns to the greatest extent possible shall be used.
5. Grading: Grading is considered development and may not take place on property within a special flood hazard area unless a floodplain permit is issued. All grading shall be done so as to minimize impacts within all special flood hazard areas. Depending on the extent and nature of the grading, a Flood Elevation Study may be required.
6. Electrical, Mechanical and Plumbing Equipment/Facilities: Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be elevated to at least one foot (1') above the BFE.
7. General Regulations for Subdivisions and New Development:
 - a. All subdivisions and new development shall be consistent with the need to minimize flood damage and shall be reasonably safe from flooding.
 - b. Public utilities and facilities including, but not limited to: sewer, gas, electrical, telephone, and water systems shall be located and constructed to minimize flood damage and certified by a professional engineer licensed in the State of Idaho.
 - c. For subdivisions and master site plans, an evacuation plan indicating alternative vehicular access and escape routes shall be filed with the Ada City-County Emergency Management office and the floodplain administrator. The evacuation plan can be submitted as a condition of approval.
 - d. Adequate drainage shall be provided to reduce exposure to flood damage.
8. Utility Work: All utility work shall use designs, materials, and construction methods that preclude failure due to flooding and assure continued service during flood events.
 - a. All new and replacement water supply systems shall be designed to eliminate infiltration of floodwaters into the system.
 - b. New and replacement sewage treatment infrastructure and sewage collection and disposal systems shall be designed to eliminate infiltration

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of floodwaters into the systems and discharge from the systems into floodwaters.

9. Watercourse Alteration / Relocation: No alteration or relocation of a watercourse shall be permitted if it diminishes the flood-carrying capacity of the watercourse.
10. Substantial Damage: A structure, regardless of whether it was covered by flood insurance, shall be considered to have sustained substantial damage if it meets either of the substantial damage definitions in subsection 8-3F-5. Work on structures that have been substantially damaged is considered to be a substantial improvement regardless of the actual repair work performed, and must comply with the applicable general regulations and standards in subsections 8-3F-7 and 8-3F-8.

8-3F-8: **STANDARDS:**

8-3F-8-1: **LAND USE RESTRICTIONS:**

A. **AE, AH, AO, A, and D Zones:** The following uses are prohibited in an AE, AH, AO, A, D, or an A Zone where the base flood elevations have been determined or estimated. Despite any other regulations of this title, prohibited uses shall include the manufacture and/or storage of materials that are buoyant, flammable, toxic or explosive or may present a hazard to public health or safety in time of flooding; and/or new construction or substantial improvement of schools, hospitals, or other intermediate care facilities:

1. Adult respite care center;
2. Children's treatment facility
3. Daycare Center
4. Explosive Manufacturing
5. Flammable substance storage
6. Foster home, group
7. Gasoline, diesel, or alternative fuel sales
8. Hospital
9. Junkyard or automobile wrecking yard
10. Manufacture of electronic or electrical products
11. Manufacture or processing of hazardous chemicals or gases
12. Manufacture home storage
13. Nursing facility, skilled
14. Portable classroom
15. Residential care facility
16. Sanitary landfill, restricted
17. School, vocational or trade
18. Soil or water remediation
19. Tannery
20. Vehicle impound yard

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- B. **Regulatory Floodway:** Only open space uses, or those that do not involve and / or include new development or substantial improvements may potentially be allowed within a regulatory floodway subject to the regulations and standards contained herein. Prohibited uses within the regulatory floodway shall include:
1. The manufacture and/or storage of materials that are buoyant, flammable, toxic, radioactive or explosive or may present a hazard to public health or safety in time of flooding.
 2. New construction or substantial improvement of schools, hospitals, or other intermediate care facilities.
 3. New construction or substantial improvement of residential, commercial or industrial uses.

8-3F-8-2: A AND D ZONES:

- A. **General – A / D Zones:** All development within an A Zone or a D Zone shall: 1) require determination of the base flood elevation, and 2) be subject to the procedural requirements of section 8-3F-6 of this article, as applicable.
- B. **New Development and/or Substantial Improvement – A / D Zones:** All new development, and/or substantial improvement of both residential and nonresidential structures located within an A Zone or a D Zone shall comply with the following:
1. **Base Flood Elevation (BFE) Establishment:** If BFE data has not already been established within an A Zone or a D Zone, BFE data shall be established by the following methods:
 - a. The floodplain administrator may require applicants to submit information including, but not limited to, historical data, high water marks, photographs of past flooding and/or any other available data. The applicant shall propose a BFE based on the available data. The floodplain administrator shall concur with the proposed BFE or provide justification or additional information to support a different BFE. Under this method, failure to elevate at least two feet (2') above adjacent grade may result in higher insurance rates.
 - b. If other flood data sources are not available, a flood elevation study as described in subsection 8-3F-6.D of this article, shall be submitted to Development Services Department and approved by the county engineer prior to commencement of any development or site work.

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- i. Prior to issuance of any building permit, a letter of map revision shall be prepared as detailed in subsection 8-3F-6.D, submitted to and approved by FEMA.
 2. Residential Structure: Once BFE data is established, new construction and/or substantial improvements of a residential structure shall comply with the applicable standards of section 8-3F-8-3 or 8-3F-8-4 of this article.
 3. Nonresidential Structure: Once BFE data is established, new construction and/or substantial improvement of any commercial, industrial, or other nonresidential structure shall comply with the applicable standards of section 8-3F-8-3 or 8-3F-8-4 of this article.
- C. **Subdivision and/or Manufactured Home Park – A / D Zones:** A flood elevation study (FES) as detailed in subsection 8-3F-6.D of this article, shall be submitted concurrently with an application for a subdivision or manufactured home park within an A Zone or a D Zone. Following approval of the FES by the floodplain administrator, the applicant and/or owner shall request a Letter of Map Change (LOMC) or Letter of Map Revision (LOMR) as detailed in section 8-3F-6.D of this article, to change the official flood insurance rate maps based on the information associated with the approved FES. The applicant and/or owner shall submit a signed copy of a LOMC and/or a LOMR prior to approval of the final plat, or prior to issuance of any building permit within a subdivision or manufactured home park.
- D. **Manufactured Home – A / D Zones:** A manufactured home placed within an A Zone or a D Zone shall be installed using methods and practices which minimize flood damage. Said methods and practices shall include the anchoring of the home to resist flotation, collapse, or lateral movements. Anchoring techniques may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors in addition to any applicable anchoring requirements for resisting wind forces. Other anchoring practices are described in the FEMA publication "Manufactured Home Installation in Flood Hazard Areas".
- E. **Recreational Vehicle – A / D Zones:** Any recreational vehicle placed on property within an A Zone or a D Zone shall meet one of the following additional standards:
 1. The recreational vehicle shall be on site for fewer than one hundred eighty (180) consecutive days;
 2. The recreational vehicle shall be fully licensed and ready for highway use, be on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or

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3. The recreational vehicle shall meet the anchoring requirements set forth in subsection D of this section.

8-3F-8-3: AE AND AH ZONES:

A. General Standards – AE / AH Zones:

1. Drainage – AH Zone: Adequate drainage paths around structures on slopes shall be provided in an AH Zone to guide floodwaters around and away from proposed structures.
2. All grading shall be done so as to minimize impacts within all special flood hazard areas. Depending on the extent and nature of the grading, a Flood Elevation Study may be required along with a Letter of Map Change (LOMC).

A. Residential Structure – AE / AH Zones: All new construction and/or substantial improvement of residential structures proposed within an AE Zone or an AH Zone must comply with the following standards:

1. Residential structures shall have the lowest floor including basement and crawlspace, elevated to the base flood elevation (BFE) plus 1 foot, confirmed by elevation certificates detailed in subsection 8-3F-6.D of this article. Fully enclosed areas below the BFE can only be used for parking of vehicles, building access and storage.
2. Wet Floodproofing: Certain enclosed areas may be permitted below the BFE if evidence is submitted as detailed in subsection 8-3F-6.D of this article, which has been prepared by a professional engineer licensed in the State of Idaho that certifies compliance with the following:
 - a. The enclosed area is not a basement, and is strictly limited in use such as for the parking of vehicles, limited storage and / or access to the structure.
 - b. Electrical, mechanical and plumbing facilities comply with general regulations identified in section 8-3F-7 of this article.
 - c. The enclosed area(s) is designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters and complies with the following:
 - i. A minimum of two (2) openings shall be provided that have a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.

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- ii. The bottom of all openings shall be no more than one foot (1') above the exterior or interior grade or floor immediately below the opening, measured from highest adjacent grade or floor.
- iii. Openings may be equipped with screens, louvers, or other coverings or devices provided they permit the automatic entry and exit of floodwaters. Openings shall meet the minimum FEMA standards for number (quantity), size and type.
- iv. Certification shall be submitted that documents the amount of flood opening each flood opening provides.

C. **Nonresidential Structure – AE / AH Zones:** All new construction and/or substantial improvement of any commercial, industrial, or other nonresidential structure within an AE or an AH Zone shall either be elevated or floodproofed in compliance with following standards:

- 1. Elevation: If the structure is not going to be floodproofed, elevation certificates are required as described in subsection 8-3F-6.D of this article that certify compliance with the following standards:
 - a. The lowest floor including basement, shall be elevated to the flood protection elevation.
 - b. The structure shall meet the standards for space below the lowest floor as described in subsection B.2 of this section.
- 2. Dry Floodproofing: If the structure is not going to be elevated, a flood proofing certificate is required as described in section 8-3F-6.D of this article that certifies compliance with the following standards:
 - a. The lowest floor, together with attendant electrical, mechanical and plumbing facilities, shall be floodproofed so that below one foot (1') above the BFE the structure is watertight with walls substantially impermeable to the passage of water.
 - b. The proposed structure shall be watertight and shall have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
 - c. The proposed design shall be certified by a professional engineer licensed in the State of Idaho and the design and methods of construction shall be in accord with accepted standards of practice for meeting regulations of this subsection based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the floodplain administrator as set forth in section 8-3F-6.D of this article.

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- d. The floodplain administrator shall notify applicants that flood insurance premiums will be based on rates that are one foot (1') below the floodproofed level (e.g., a structure floodproofed to the BFE will be rated as 1 foot below that level).
3. Wet Floodproofing: If the floodplain administrator authorizes an accessory and/or agricultural structure to be wet floodproofed, a flood proofing certificate is required as described in section 8-3F-6.D of this article that certifies compliance with the following standards:
 - a. The electrical, mechanical and plumbing facilities shall be raised or completely floodproofed to at least one foot (1') above the BFE.
 - b. The proposed structure shall be designed so that floodwaters may enter the structure.
 - c. The proposed design shall be certified by a professional engineer licensed in the State of Idaho and the design and methods of construction shall be in accord with accepted standards of practice for meeting regulations of this subsection based on their development and/or review of the structural design, specifications, and plans.
 - d. The floodplain administrator shall notify applicants that flood insurance premiums will be based on rates that are one foot (1') below the floodproofed level (e.g., a structure floodproofed to the BFE will be rated as 1 foot below that level).
- D. **Manufactured Home – AE / AH Zones:** A manufactured home placed or substantially improved within an AH Zone or an AE Zone requires elevation certificates detailed in subsection 8-3F-6.D of this article that demonstrate compliance with the following standards:
1. A manufactured home shall be installed using methods and practices which minimize flood damage. Said methods and practices shall include the anchoring of the home to resist flotation, collapse, or lateral movements. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors in addition to any applicable anchoring requirements for resisting wind forces. Other anchoring techniques are described in the FEMA publication "Manufactured Home Installation In Flood Hazard Areas".
 2. A manufactured home shall be elevated on a permanent foundation so the lowest floor is elevated to the BFE plus 1 foot confirmed by an elevation certificate.

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- E. **Recreational Vehicle – AE / AH Zones:** Any recreational vehicle placed on property within an AE Zone or an AH Zone shall meet one of the following additional standards:
1. The recreational vehicle shall be on site for fewer than one hundred eighty (180) consecutive days;
 2. The recreational vehicle shall be fully licensed and ready for highway use, be on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
 3. The recreational vehicle shall meet the elevation and anchoring requirements set forth in subsection D of this section.

8-3F-8-4 AO ZONE:

A. **General Standards – AO Zone:**

1. **Drainage:** Adequate drainage paths around structures on slopes shall be provided in an AO Zone to guide floodwaters around and away from proposed structures.
2. **Hazardous Velocities:** Where hazardous velocities are noted on the flood insurance rate map, proper construction techniques and methods shall be used to mitigate the effects of the velocities.
3. **Manufactured home:** Manufactured homes proposed within an AO Zone shall comply with the standards identified in section 8-3F-8-3 of this article.
4. **Recreational Vehicle:** Recreational vehicles placed on property within an AO Zone shall comply with the standards identified in section 8-3F-8-3 of this article.

B. **Residential Structure – AO Zone:** All new construction and/or substantial improvement of a residential structure proposed within an AO Zone requires elevation certificates described in subsection 8-3F-6.D of this article that certify compliance with the following standards:

1. New construction and substantial improvements of residential structures within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade of the building site by a height equal to the depth number specified on the flood insurance rate map (FIRM) plus one foot (1'), or at least two feet (2'), if no depth number is specified. Where appropriate, such structures shall be elevated above the crown of the nearest

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roadway by a height equal to the depth number specified on the FIRM plus one foot (1').

- C. **Nonresidential Structure – AO Zone:** All new construction and/or substantial improvement of any commercial, industrial, or other nonresidential structure within an AO Zone shall either be elevated or floodproofed in compliance with following standards:
1. Elevation: If the structure is not going to be floodproofed, elevation certificates are required as described in section 8-3F-6.D of this article that certify compliance with the following standard:
 - a. The lowest floor (including basement) shall be elevated above the highest adjacent grade of the structure by a height equal to the depth number specified on the flood insurance rate map plus one foot (1'). Where appropriate, such structures shall be elevated above the crown of the nearest roadway by a height equal to the depth number specified on the FIRM plus one foot (1').
 2. Dry Floodproofing: If the structure is not going to be elevated, a flood proofing certificate is required as described in section 8-3F-6.D of this article that certifies compliance with the following standards:
 - a. The lowest floor, together with attendant electrical, mechanical and plumbing facilities, shall be completely floodproofed to or above the level in subsection C-1-a of this section, so that any space below that level is watertight, with walls substantially impermeable to the passage of water.
 - b. The proposed structure shall be watertight and shall have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
 - c. The proposed design shall be certified by a professional engineer licensed in the State of Idaho and the design and methods of construction shall be in accord with accepted standards of practice for meeting regulations of this subsection B based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the floodplain administrator as set forth in section 8-3F-6.D of this article.
 3. Wet Floodproofing: If the floodplain administrator authorizes an accessory and/or agricultural structure to be wet floodproofed, a flood proofing certificate is required as described in section 8-3F-6.D of this article that certifies compliance with the following standards:

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- a. The electrical, mechanical and plumbing facilities shall be completely floodproofed to, or above, the level in subsection C-1-a of this section.
- b. The proposed structure shall be designed so that flood waters may enter the structure. If this method is used, a professional engineer licensed in the State of Idaho shall certify compliance.
- c. The proposed design shall be certified by a professional engineer licensed in the State of Idaho and the design and methods of construction shall be in accord with accepted standards of practice for meeting regulations of subsection B of this section based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the floodplain administrator as set forth in section 8-3F-6.D of this article.

8-3F-8-5: **REGULATORY FLOODWAY:**

- A. Standards: The following standards shall apply to all uses and development within the regulatory floodway:
 1. New development or substantial improvements are not allowed within a regulatory floodway. If encroachment is unavoidable, no-rise certification as detailed in subsection 8-3F-6.D of this article shall be provided by a professional engineer licensed in the State of Idaho demonstrating that the encroachment will not result in any increase in base flood levels during the occurrence of the base flood discharge.
 2. LOMC: If a change or revision of a flood insurance rate map is warranted by any of the specific standards identified in this article, the applicant and/or owner shall submit a request to FEMA for a Letter of Map Change. A LOMC reflects an official revision/amendment to an effective Flood Insurance Rate Map. The applicant and/or owner may submit the request to FEMA online themselves or retain a professional engineer licensed in the State of Idaho to prepare and submit the amendment and/or revision request to the federal emergency management agency (FEMA). A copy of the official amendment and/or revision letter signed by FEMA shall be submitted to the floodplain administrator prior to issuance of a building or grading permit, approval of a floodplain application, or certificate of occupancy.
 3. If no-rise certification for encroachment is provided and approved, pursuant to subsection A1 of this section, all new construction and substantial improvements shall comply with the applicable standards for uses in the flood fringe detailed in sections 8-3F-8-2 through 8-3F-8-4 inclusive of this article.

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4. In addition to the standards for uses in subsection A of this section, uses proposed in a foothill or other hillside tributary floodplain as determined by the Ada County engineer shall also meet the standards set forth in section 8-3F-8-6 of this article.
- B. Pit, Mine Or Quarry: If a pit, mine or quarry is proposed within a floodway, approval of a flood elevation study (FES) as described in section 8-3F-6.D of this article, shall be required as a condition of approval. The FES shall demonstrate that the extraction site will be designed to avoid river avulsion. The FES must be approved prior to commencement of the use or breaking ground. Material stockpiles and permanently installed structures shall not be located within the regulatory floodway.
1. LOMC: If a change or revision of a flood insurance rate map is warranted by any of the specific standards identified in this article, the applicant and/or owner shall submit a request to FEMA for a Letter of Map Change. A LOMC reflects an official revision/amendment to an effective Flood Insurance Rate Map. The applicant and/or owner may submit the request to FEMA online themselves or retain a professional engineer licensed in the State of Idaho to prepare and submit the amendment and/or revision request to the federal emergency management agency (FEMA). A copy of the official amendment and/or revision letter signed by FEMA shall be submitted to the floodplain administrator prior to approval of a floodplain application or issuance of a grading permit,

8-3F-8-6: **FOOTHILL OR HILLSIDE TRIBUTARY FLOODPLAIN:**

- A. Development on properties that include any portion of a foothill or hillside tributary floodplain shall provide for channel stabilization and bank stabilization, or be set back from the edge of the floodplain sufficient to protect the use and floodplain from flood related erosion. Such measures shall be certified by a professional engineer licensed in the State of Idaho to be effective for the flood flows and velocities anticipated at the site as determined through the completion of a flood elevation study.
- B. Transportation routes shall not be allowed within areas determined to be floodways except as necessary to cross the floodway where no reasonable alternative exists. Bridges that cross foothill or hillside tributary floodplains shall have all horizontal bridge support members elevated to the flood protection elevation, and all supporting members shall be designed to withstand the flows and velocities of the base flood.
- C. Check dams shall be designed and certified by a professional engineer licensed in the State of Idaho and reviewed and approved by the Ada County engineer to ensure the safety of persons and property that could be affected by the construction of the check dam. A flood elevation study shall be completed by an

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professional engineer licensed in the State of Idaho on behalf of the applicant/owner, submitted to and approved by the Ada County engineer as part of the floodplain application.

8-3F-8-7: **LETTER OF MAP REVISION BASED ON FILL (LOMR-F) ZONE:**

- A. Residential Structures: New construction and/or substantial improvements of residential structures shall comply with the applicable standards of section 8-3F-8-3.
- B. Nonresidential Structures: New construction and/or substantial improvement of any commercial, industrial, or other nonresidential structure shall comply with section 8-3F-8-3.

8-3F-9: **REQUIRED FINDING:** In order to approve the application, the decision making body shall find that the proposed subdivision or development including new construction, placement of manufacture home or substantial improvement, meets the general regulations and standards as set forth in this article.

8-3F-10: **APPEALS:**

- A. Appeals of determinations made by the floodplain administrator shall be heard by the board and shall comply with procedures of section 8-7-7 of this title.
- B. Appeals which allege there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this article, shall be supported by technical and scientific evidence which shall include, but is not limited to, the following items:
 - 1. A copy of the recorded plat map showing the property.
 - 2. A topographic map showing ground elevation contours and a line representing the area subject to inundation by the base flood.
 - 3. Certification by a professional engineer licensed in the State of Idaho of the elevation of the lowest floor (including basement), the elevation of any fill, the date on which the fill was placed, and the elevation to which any structure has been floodproofed.
- C. The board shall base their decision on an appeal on the specific and technical evidence in the record.

8-3F-11: **VARIANCES TO FLOOD INSURANCE PROGRAM STANDARDS:**

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- A. Purpose: The purpose of this section is to provide a relief from National Flood Insurance Program standards as they pertain to a physical piece of property and at the same time not jeopardizing sufficient flood protection.
- B. Applicability: Variances may be issued consistent with the FEMA guidelines as set forth in code of federal regulations 44 CFR chapter 1, section 60.6.
- C. Process:
 - 1. An application and fees, as set forth in chapter 7, article A of this title, shall be submitted to the director on forms provided by the development services department.
 - 2. The board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article including, but not limited to, the expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters if applicable, expected at the site.
 - 3. The board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.
 - 4. The board shall apply the findings listed in subsection D of this section to review the variance.
 - 5. Any applicant to whom a variance is granted shall be given written notice that the structure shall be permitted to be built with a lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk to life and property resulting from the reduced lowest floor elevation.
- D. Required Variance Findings:
 - 1. The proposed use adequately mitigates any danger that materials may be swept onto other properties to the injury of others;
 - 2. The proposed use adequately mitigates the danger to life and property due to flooding or erosion damage;
 - 3. The proposed use minimizes the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - 4. The proposed use provides an important service to the community;
 - 5. The proposed use is functionally dependent on a waterfront location;

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6. The proposed use shall not have available alternative locations that are not subject to flooding or erosion damage;
7. The proposed use is compatible with existing and anticipated development;
8. The proposed use is consistent with the applicable comprehensive plan and floodplain management program for the area;
9. The proposed use provides for safe access to the property in times of flood for ordinary and emergency vehicles;
10. The proposed use shall not cause extraordinary public expense in providing governmental services during post flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water systems, and streets and bridges;
11. The variance is the minimum necessary, considering the flood hazard, to afford relief;
12. The variance shall not result in increased flood heights during the base flood discharge;
13. The variance shall not cause fraud on or victimization of the public;
14. The variance shall not conflict with existing local laws or ordinances; and
15. A variance shall not be personal in nature and shall not pertain to the structure or its inhabitant's economic or financial circumstances.