FLOOD DAMAGE PREVENTION ORDINANCE – IDAHO MODEL ORDINANCE

ORDINANCE NO.	

Article I. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES

Section A. Statutory Authority

The Legislature of the State of Idaho, pursuant to Idaho Code §§ 46-1020, 46-1023, and 46-1024, authorizes local governments to adopt floodplain management ordinances that identify floodplains and minimum floodplain development standards to minimize flood hazards and protect human life, health, and property. Therefore, the {Board, Council, etc.} of the {insert name of community}, Idaho does hereby ordain as follows:

Section B. Findings of Fact

- 1. The flood hazard areas of {insert name of community} are subject to periodic inundation that results in:
 - a. loss of life and property;
 - b. health and safety hazards;
 - c. disruption of commerce and governmental services;
 - d. extraordinary public expenditures for flood relief and protection; and
 - e. impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- 2. These flood losses may be caused by development in flood hazard areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.
- 3. Local government units have the primary responsibility for planning, adopting, and enforcing land use regulations to accomplish proper floodplain management.

Section C. Statement of Purpose

The purpose of this ordinance is to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- 1. Protect human life, health, and property;
- 2. Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains;
- 3. Help maintain a stable tax base by providing for the sound use and development of flood prone areas;
- 4. Minimize expenditure of public money for costly flood control projects;

- 5. Minimize the need for rescue and emergency services associated with flooding, generally undertaken at the expense of the general public;
- 6. Minimize prolonged business interruptions;
- 7. Ensure potential buyers are notified the property is in an area of special flood hazard; and
- 8. Ensure those who occupy the areas of special flood hazard assume responsibility for their actions.

Section D. Objectives and Methods of Reducing Flood Losses

In order to accomplish its purpose, this ordinance includes methods and provisions to:

- 1. Require that development which is vulnerable to floods, including structures and facilities necessary for the general health, safety, and welfare of citizens, be protected against flood damage at the time of initial construction;
- 2. Restrict or prohibit development which are dangerous to health, safety, and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
- 3. Control filling, grading, dredging, and other development which may increase flood damage or erosion;
- 4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands;
- 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters.

Article II. DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted according to the meaning they have in common usage and to give this ordinance its most reasonable application.

REQUIRED DEFINITIONS are in blue italics. State recommends adopting all definitions.

<u>Accessory and Agricultural Structures (appurtenant structure)</u>: a structure on the same lot or parcel as a principal structure, the use of which is incidental and subordinate to the principal structure.

<u>Addition (to an existing building)</u>: an extension or increase in the floor area or height of a building or structure.

<u>Agricultural Structures (appurtenant structure)</u>: a structure which is used exclusively in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock; specifically excludes any structures used for human habitation.

<u>Appeal</u>: a request for review of the Floodplain Administrator's interpretation of provisions of this ordinance or request for a variance.

<u>Area of Shallow Flooding</u>: a designated AO, AH, AR/AO, or AR/AH zone on a community's Flood Insurance Rate Map (FIRM) with a 1 percent (1%) or greater annual chance of flooding to an

average depth of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of Special Flood Hazard: see Special Flood Hazard Area (SFHA).

Base Flood: the flood having a one (1) percent (1%) chance of being equaled or exceeded in any given year.

<u>Base Flood Elevation (BFE)</u>: a determination by the Federal Insurance Administrator of the water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year. When the BFE has not been provided in a Special Flood Hazard Area, it may be obtained from engineering studies available from a Federal, State, or other source using FEMA-approved engineering methodologies. This elevation, when combined with the Freeboard, establishes the Flood Protection Elevation.

Basement: any area of the building having its floor sub grade (below ground level) on all sides. **Building**: see Structure.

Cleaning (irrigation): mowing, cutting, or burning of weeds, trees and other nuisance growth, including algae growth, application of pesticides as permitted, removal of beaver dams, and removal of trash or other debris whether floating, lodged or otherwise obstructing the conveyance of water flow through channels and works.

<u>Critical Facilities</u>: facilities that are vital to flood response activities or critical to the health and safety of the public before, during, and after a flood, such as a hospital, emergency operations center, electric substation, police station, fire station, nursing home, school, vehicle and equipment storage facility, or shelter; and facilities that, if flooded, would make the flood problem and its impacts much worse, such as a hazardous materials facility, power generation facility, water utility, or wastewater treatment plant.

<u>Datum</u>: the vertical datum is a base measurement point (or set of points) from which all elevations are determined. Historically, that common set of points was the National Geodetic Vertical Datum of 1929 (NGVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88).

<u>Development</u>: any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

<u>Development Activity</u>: any activity defined as Development which will necessitate a Floodplain Development Permit; such as: the construction of buildings, structures, or accessory structures; additions or substantial improvements to existing structures; bulkheads, retaining walls, piers, and pools; the placement of mobile homes; or the deposition or extraction of materials; the construction or elevation of dikes, berms and levees.

<u>Digital Flood Insurance Rate Map (DFIRM)</u>: the digital official map of a community, issued by the Federal Insurance Administrator, on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

<u>Elevated Building</u>: for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

<u>Elevation Certificate</u>: The Elevation Certificate is an important administrative tool of the NFIP. It is used to determine the proper flood insurance premium rate; it is used to document elevation information; and it may be used to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).

<u>Enclosure</u>: an area enclosed by solid walls below the BFE/FPE or an area formed when any space below the BFE/FPE is enclosed on all sides by walls or partitions. Insect screening or open wood lattice used to surround space below the BFE/RFPE is not considered an enclosure.

Encroachment: the advance or infringement of uses, fill, excavation, buildings, structures, or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

<u>Existing Construction</u>: for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures."

Existing Manufactured Home Park or Manufactured Home Subdivision: a manufactured home park or subdivision where the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed before the effective date of the original floodplain management regulations adopted by the community, {insert the date of original floodplain ordinance/regulations or the date of regular entry to the NFIP whichever is the earliest date }.

Existing Structures: see existing construction.

<u>Expansion to an Existing Manufactured Home Park or Subdivision</u>: the preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or Flooding:

a. A general and temporary condition of partial or complete inundation of normally dry land areas from:

- 1. The overflow of inland or tidal waters.
- 2. The unusual and rapid accumulation or runoff of surface waters from any source.
- 3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph a.2. of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph a.1. of this definition.

Flood Boundary and Floodway Map (FBFM):

The FBFM shows how the floodplain is divided into the floodway and flood fringe where streams are studied in detail. They also show general floodplain areas where floodplains have been studied by approximate methods. (Old format Pre 1986)

Flood Elevation Determination: See Base Flood Elevation (BFE)

Flood Elevation Study: See Flood Insurance Study (FIS)

<u>Flood Hazard Boundary Map (FHBM)</u>: an official map of a community, issued by the Federal Insurance Administrator, where the boundaries of the flood, mudslide (i.e., mudflow) related erosion areas having special hazards have been designated as Zones A, M, and/or E.

Flood Insurance Rate Map (FIRM): an official map of a community, on which the Federal Insurance Administrator has delineated both the special flood hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

<u>Flood Insurance Study (FIS)</u>: an examination, evaluation, and determination of flood hazards and, if appropriate, corresponding water surface elevations; or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

<u>Flood Zone</u>: a geographical area shown on a Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM) that reflects the severity or type of flooding in the area, and applicable insurance rate.

<u>Floodplain or Flood-Prone Area</u>: any land area susceptible to being inundated by water from any source (see definition of "flooding").

<u>Floodplain Administrator</u>: the individual appointed to administer and enforce the floodplain management regulations.

<u>Floodplain Development Permit</u>: any type of permit that is required in conformance with the provisions of this ordinance, prior to the commencement of any development activity.

<u>Floodplain Management</u>: the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and flood plain management regulations.

<u>Floodplain Management Regulations</u>: zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a flood plain ordinance, grading ordinance, and erosion control ordinance), and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

<u>Floodproofing</u>: any combination of structural and non-structural 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.

Flood Protection Elevation (FPE): the Base Flood Elevation plus the Freeboard.

- a. In "Special Flood Hazard Areas" where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE plus {insert number} feet of freeboard; and
- b. In "Special Flood Hazard Areas" where no BFE has been established, this elevation shall be at least {insert number} feet above the highest adjacent grade.

Two (2) feet is State-recommendation, greater than two (2) feet is OPTIONAL.

<u>Flood Protection System</u>: those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes dams, reservoirs, levees, or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

<u>Floodway</u>: 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 more than a designated height.

<u>Freeboard</u>: a factor of safety usually expressed in feet above a flood level for the purposes of floodplain management. Freeboard tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, obstructed bridge openings, debris and ice jams, and the hydrologic effects of urbanization in a watershed. The Base Flood Elevation (BFE) plus the freeboard establishes the Flood Protection Elevation (FPE). Freeboard shall be {insert number} of feet. Two (2) feet is State-recommendation, greater than two (2) feet is OPTIONAL.

<u>Functionally Dependent Use</u>: a facility that cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

<u>General Irrigation Floodplain Development Permit (GIFD Permit)</u>: The intent of the GIFD permit is to collectively authorize low-to-no impact irrigation and drainage development activities or uses in the floodplain which inherently do not increase the BFE. GIFD permits apply to all qualifying activities within the spatial extents of an irrigation delivery or drainage system and within the regulatory floodway or SFHA, over a predetermined period of time, not to exceed five years. Issuance of a GIFD permit requires coordination between the irrigation entity and the Floodplain Administrator.

<u>Highest Adjacent Grade (HAG)</u>: the highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the FEMA Elevation Certificate for HAG related to building elevation information.

Historic Structure: a structure that is:

- a. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or to a district preliminarily determined by the Secretary to qualify as a registered historic district;
- c. Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or
- d. Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:
 - 1. by an approved state program as determined by the Secretary of the Interior, or
 - 2. directly by the Secretary of the Interior in states without approved programs.

<u>Letter of Map Change (LOMC)</u>: a general term used to refer to the several types of revisions and amendments to FIRMs that can be accomplished by letter. They include Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-F)

1. <u>Letter of Map Amendment (LOMA)</u>: an official amendment, by letter, to an effective National Flood Insurance Program (NFIP) map. A LOMA establishes a property's or structure's location

in relation to the Special Flood Hazard Area (SFHA). LOMAs are usually issued because a property or structure has been inadvertently mapped as being in the floodplain but is actually on natural high ground above the base flood elevation.

- 2. Letter of Map Revision (LOMR): FEMA's modification to an effective Flood Insurance Rate Map (FIRM) or a Flood Boundary and Floodway Map (FBFM) or both. LOMRs are generally 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 (BFEs), or the Special Flood Hazard Area (SFHA). The LOMR officially revises the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM), and sometimes the Flood Insurance Study (FIS) report, and when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report.
- 3. <u>Letter of Map Revision Based on Fill (LOMR-F)</u>: FEMA's modification of the Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (FIRM) based on the placement of fill outside the existing regulatory floodway. The LOMR-F does not change the FIRM, FBFM, or FIS report.
- 4. <u>Conditional Letter of Map Revision (CLOMR)</u>: A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map (FIRM) or Flood Insurance Study (FIS). Upon submission and approval of certified as-built documentation, a Letter of Map Revision (LOMR) may be issued by FEMA to revise the effective FIRM. Building Permits and/or Flood Development Permits cannot be issued based on a CLOMR, because a CLOMR does not change the NFIP map.

<u>Levee</u>: a man-made structure, usually an earthen embankment, designed and constructed according to sound engineering practices, to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

<u>Levee System</u>: a flood protection system that consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Lowest Adjacent Grade (LAG): the lowest point of the ground level next to the structure. Refer to the FEMA Elevation Certificate for LAG related to building elevation information.

<u>Lowest Floor</u>: the lowest floor of the lowest enclosed area (including basement). 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 building'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 44 CFR § 60.3 and this ordinance.

<u>Maintenance (irrigation)</u>: the act of ongoing upkeep of existing structures required to keep channels in a condition adequate to support the conveyance of irrigation and drainage water (this does not include the complete replacement or substantial replacement of an existing structure). Maintenance is further defined as the care or upkeep of channels, works, appurtenances, easements, utility corridors and property; to keep in an existing state, specified state of repair, and efficiency; return to a former condition, elevation, place, and position; to

preserve from failure or decline; or repair or renovate so as to return it to its original condition. Maintenance does not include dredging as defined herein.

<u>Manufactured Home</u>: 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." <u>Manufactured Home Park or Subdivision</u>: a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

<u>Market Value</u>: the building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (Actual Cash Value); or adjusted tax assessed values.

<u>Mean Sea Level</u>: for purposes of the National Flood Insurance Program (NFIP), the National Geodetic Vertical Datum (NGVD) of 1929 or other datum (such as North America Vertical Datum of 1988 - NAVD88) to which Base Flood Elevations (BFEs) shown on a community's FIRM are referenced.

<u>Mudslide (i.e., mudflow)</u>: describes a condition where there is a river, flow, or inundation of liquid mud down a hillside usually as a result of a dual condition of loss of brush cover and the subsequent accumulation of water on the ground preceded by a period of unusually heavy or sustained rain. A mudslide (i.e., mudflow) may occur as a distinct phenomenon while a landslide is in progress, and will be recognized as such by the Administrator only if the mudflow, and not the landslide, is the proximate cause of damage that occurs.

<u>Mudslide (i.e., mudflow) Area Management</u>: the operation of an overall program of corrective and preventive measures for reducing mudslide (i.e., mudflow) damage, including but not limited to emergency preparedness plans, mudslide control works, and flood plain management regulations.

<u>Mudslide (i.e., mudflow) Prone Area</u>: an area with land surfaces and slopes of unconsolidated material where the history, geology, and climate indicate a potential for mudflow.

<u>National Flood Insurance Program (NFIP)</u>: The NFIP is a Federal program created by Congress to mitigate future flood losses nationwide through sound, community-enforced building and zoning ordinances and to provide access to affordable, federally backed flood insurance protection for property owners.

<u>New Construction</u>: for floodplain management purposes, a structure for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

Any construction started after {insert effective date of community's first floodplain management ordinance adopted by the community/NFIP regular entry date} and before the effective start date of this floodplain management ordinance is subject to the ordinance in effect at the time the permit was issued, provided the start of construction was within 180 days of permit issuance.

New Manufactured Home Park or Subdivision: a place where the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community {insert the date of the first effective regulations}.

<u>Operation (irrigation)</u>: the regular and reoccurring performance of typical work by an irrigation or drainage entity including, but not limited to: the delivery or drainage of water, measurement of water, and adjustment of irrigation and drainage works and all related appurtenances.

<u>Post-FIRM</u>: construction or other development for which the "start of construction" occurred on or after the effective date of the initial Flood Insurance Rate Map (FIRM).

<u>Pre-FIRM</u>: construction or other development for which the "start of construction" occurred before {insert effective date of community's first FIRM}, the effective date of the initial Flood Insurance Rate Map (FIRM).

Recreational Vehicle: a vehicle that is:

- a. Built on a single chassis, and
- b. 400 square feet or less when measured at the largest horizontal projection, and
- 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: See Floodway

Remedy a Violation: to bring the structure or other development into compliance with State or local flood plain management regulations, or, if this is not possible, to reduce the impacts of its non-compliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

Repair (irrigation): the restoration to good or sound conditions of any part of an existing structure, channel, channel bank, or service road for the purpose of maintenance (this does not include the complete replacement or substantial replacement of an existing structure). Repair does not include dredging as defined herein.

<u>Repetitive Loss Structure</u>: An NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978.

<u>Riverine</u>: relating to, formed by, or resembling a river (including tributaries), stream, brook, etc. <u>Special Flood Hazard Area (SFHA)</u>: the land in the flood plain within a community subject to a one percent (1%) or greater chance of flooding in any given year. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

<u>Start of Construction</u>: includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 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 slab or footings, the installation of piles, the construction of columns, or any work beyond the stage 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 and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start

of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure: a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

<u>Substantial Damage</u>: damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent (50%) of its market value before the damage occurred. See definition of "substantial improvement". Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent (25%) of the market value of the structure before the damage occurred. (The last sentence is OPTIONAL but required for eligibility for Increased Cost of Compliance (ICC) benefits for repetitive losses.)

<u>Substantial Improvement</u>: any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent (50%) of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

- 1. 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 local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- 2. Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure" and the alteration is approved by variance issued pursuant to this ordinance.

<u>Technical Bulletins and Technical Fact Sheets</u>: FEMA publications that provide guidance concerning the building performance standards of the NFIP, which are contained in Title 44 of the U S Code of Federal Regulations § 60.3. The bulletins and fact sheets are intended for use primarily by State and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations. Rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.

It should be noted that Technical Bulletins and Technical Fact Sheets provide guidance on the minimum requirements of the NFIP regulations. State or community requirements that exceed those of the NFIP take precedence. Design professionals should contact the community officials to determine whether more restrictive State or local regulations apply to the building or site in question. All applicable standards of the State or local building code must also be met for any building in a flood hazard area. (*This definition is OPTIONAL*)

<u>Temperature Controlled</u>: having the temperature regulated by a heating and/or cooling system, built-in or appliance.

Variance: a grant of relief by the governing body from a requirement of this ordinance.

<u>Violation</u>: the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the Finished Construction Elevation Certificate, other certifications, or other evidence of compliance

required in 44 CFR § 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

<u>Water Surface Elevation</u>: the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988 (or other specified datum), of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

<u>Watercourse</u>: a lake, river, creek, stream, wash, channel, or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Article III. GENERAL PROVISIONS

Section A. Lands to Which This Ordinance Applies

This Ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction of {insert name of community}. Nothing in this ordinance is intended to allow uses or structures that are otherwise prohibited by the zoning ordinance.

Section B. Basis for Special Flood Hazard Areas

The Special Flood Hazard Areas identified by the Federal Insurance Administrator in a scientific and engineering report titled "Flood Insurance Study (FIS) for {insert exact title of FIS}", dated {insert the date of effective FIS}, with accompanying Flood Insurance Rate Maps (FIRM) or Digital Flood Insurance Rate Maps (DFIRM), and other supporting data, are adopted by reference and declared a part of this ordinance. The FIS and the FIRM are on file at the office of the {city/county} clerk {insert address}.

Section C. Establishment of Floodplain Development Permit

A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities within Special Flood Hazard Areas determined in accordance with the provisions of Article IV Section B.

Section D. Compliance

No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this ordinance and other applicable regulations.

Section E. Abrogation and Greater Restrictions

This ordinance shall not in any way repeal, abrogate, impair, or remove the necessity of compliance with any other laws, ordinances, regulations, easements, covenants, or deed restrictions, etcetera. However, where this ordinance and another conflict or overlap, whichever imposes more stringent or greater restrictions shall control.

Section F. Interpretation

In the interpretation and application of this ordinance all provisions shall be:

- 1. Considered as minimum requirements;
- 2. Liberally construed in favor of the governing body; and

3. Deemed neither to limit nor repeal any other powers granted under state statutes.

Section G. Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance 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 by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of {insert name of community} or by any officer or employee thereof for flood damages that result from reliance on this ordinance or an administrative decision lawfully made hereunder.

Section H. Penalties for Violation

No structure or land shall hereafter be located, extended, converted, or altered unless in full compliance with the terms of this ordinance and other applicable regulations.

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$_____ (\$100 recommended) or imprisoned for not more than 180 days, or both. Each day the violation continues shall be considered a separate offense. Nothing herein contained shall prevent the {insert name of community} from taking such other lawful actions as is necessary to prevent or remedy any violation.

Article IV. ADMINISTRATION

Section A. Designation of Floodplain Ordinance Administrator

The {insert title}, hereinafter referred to as the "Floodplain Administrator", is hereby appointed to administer and implement the provisions of this ordinance.

Section B. Duties and Responsibilities of the Floodplain Administrator

The Floodplain Administrator shall perform, but not be limited to, the following duties:

- Review all floodplain development applications and issue permits for all proposed development within Special Flood Hazard Areas to assure that the requirements of this ordinance have been satisfied and all proposed development is reasonably safe from flooding.
- 2. Review all proposed development within Special Flood Hazard Areas to assure that all necessary Local, State, and Federal permits have been received, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- 3. Notify adjacent communities and the Idaho Department of Water Resources State Coordinator for the National Flood Insurance Program (NFIP) prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Insurance Administrator (FIA). (*This is the LOMC procedure*)

- 4. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained; (*This is a Hydraulic & Hydrology Analysis*)
- 5. Prevent encroachments into floodways unless the certification and flood hazard reduction provisions of Article V, Section E are met.
- 6. Obtain and maintain actual elevation (in relation to mean sea level) of the lowest floor (including basement) and all attendant utilities of all new and substantially improved structures, in accordance with the provisions of Article IV, Section C.3.
- 7. Obtain and maintain actual elevation (in relation to mean sea level) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of Article IV, Section C.3.
- 8. Review plans to verify public utilities are constructed in accordance with the provisions of Article V, Section A.5-7.
- 9. When floodproofing is utilized for a particular structure, obtain and maintain certifications from a registered professional engineer or architect in accordance with the provisions of Article IV, Section C.3. and Article V, Section B.2.
- 10. Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas, and floodways (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- 11. When Base Flood Elevation (BFE) data has not been provided in accordance with the provisions of Article III, Section B, obtain, review, and reasonably utilize any BFE data, along with floodway data available from a Federal, State, or other source, including data developed pursuant to Article V, Section C.2.b., in order to administer the provisions of this ordinance.
- 12. When Base Flood Elevation (BFE) data is provided but no floodway data has been provided in accordance with the provisions of Article III, Section B, require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. (*This is a Hydraulic & Hydrology Analysis*)
- 13. When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a Special Flood Hazard Area (SFHA) is above the Base Flood Elevation (BFE), advise the property owner of the option to apply for a Letter of Map Amendment (LOMA) from FEMA. Maintain a copy of the LOMA issued by FEMA in the floodplain development permit file. (13 is OPTIONAL)

- 14. Permanently maintain all records that pertain to the administration of this ordinance and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.
- 15. Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the Floodplain Administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the Floodplain Administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.
- 16. Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, the Floodplain Administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- 17. Revoke floodplain development permits as required. The Floodplain Administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.
- 18. Make periodic inspections throughout the Special Flood Hazard Areas within the jurisdiction of the community. The Floodplain Administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- 19. Follow through with corrective procedures of Article IV, Section D.
- 20. Review, provide input, and make recommendations for variance requests.
- 21. Maintain a current map repository to include, but not limited to, the FIS Report, FIRM and other official flood maps, and studies adopted in accordance with the provisions of Article III, Section B of this ordinance, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify the NFIP State Coordinator and FEMA of your community's mapping needs.
- 22. Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-Fs) and Letters of Map Revision (LOMRs).

- 23. A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator (FIA) of the changes by submitting technical or scientific data in accordance with this part. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and flood plain management requirements will be based upon current data.
- 24. Upon occurrence, notify the Federal Insurance Administrator (FIA) in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce flood plain management regulations for a particular area. In order that all FHBM's and FIRM's accurately represent the community's boundaries, include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished flood plain management regulatory authority.

Section C. Floodplain Development Application, Permit, and Certification Requirements

- 1. Application Requirements. Application for a Floodplain Development Permit shall be made to the Floodplain Administrator prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the Floodplain Administrator to apply for a floodplain development permit:
 - a. A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - the nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - ii. the boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Article III, Section B, or a statement that the entire lot is within the Special Flood Hazard Area;
 - iii. the flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Article III, Section B:
 - iv. the boundary of the floodway(s) as determined in Article III, Section B;
 - v. the Base Flood Elevation (BFE) where provided as set forth in Article III, Section B; Article III, Section C; or Article V, Section C;
 - vi. the old and new location of any watercourse that will be altered or relocated as a result of proposed development; and
 - vii. the certification of the plot plan by a registered land surveyor or professional engineer. (vii is OPTIONAL)

- b. Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
 - i. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures;
 - ii. Elevation in relation to mean sea level to which any non-residential structure in Zone A, AE, AH, or AO will be floodproofed; and
 - iii. Elevation in relation to mean sea level to which any proposed utility equipment and machinery will be elevated or floodproofed.
- c. If floodproofing, a Floodproofing Certificate (FEMA Form 086-0-33) with supporting data, an operational plan, and an inspection and maintenance plan that include, but are not limited to, installation, exercise, and maintenance of floodproofing measures will be required prior to Certificate of Occupancy/Completion.
- d. A Foundation Plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include but are not limited to:
 - i. The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation, or on columns/posts/piers/piles/shear walls); and
 - ii. Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with Article V, Section A.8.b. when solid foundation perimeter walls are used in Zones A, AE, AH, and AO.
- e. Usage details of any enclosed areas below the lowest floor.
- f. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
- g. Certification that all other Local, State, and Federal permits required prior to floodplain development permit issuance have been received.
- h. Documentation for placement of recreational vehicles and/or temporary structures, when applicable, to ensure that the provisions of Article V, Section B.5. and 6. of this ordinance are met.
- A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and
 - i. A map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

(This is a Hydraulic & Hydrology Analysis, & may involve the LOMC procedure)

- 2. Permit Requirements. The Floodplain Development Permit shall include, but not be limited to:
 - a. A complete description of all the development to be permitted under the floodplain development permit (i.e. house, garage, pool, septic, bulkhead, cabana, pole barn, chicken coop, pier, bridge, mining, dredging, filling, rip-rap, docks, grading, paving, excavation or drilling operations, or storage of equipment or materials, etcetera).
 - b. The Special Flood Hazard Area determination for the proposed development in accordance with available data specified in Article III, Section B.
 - c. The Flood Protection Elevation required for the lowest floor and all attendant utilities.
 - d. The Flood Protection Elevation required for the protection of all utility equipment and machinery.
 - e. All certification submittal requirements with timelines.
 - f. A statement that no fill material or other development shall encroach into the floodway of any watercourse, as applicable.
 - g. The flood openings requirements, if in Zones A, AE, AH, or AO.
 - h. All floodplain development permits shall be conditional upon the start of construction of work within 180 days. A floodplain development permit shall expire 180 days after issuance unless the permitted activity has commenced as per the Start of Construction definition.
 - i. Fully enclosed areas below the lowest floor are usable solely for parking of vehicles, building access, or storage.
 - j. All materials below BFE/FPE must be flood resistant materials.
- 3. Certification Requirements.
 - a. Elevation Certificates
 - i. A Construction Drawings Elevation Certificate (FEMA Form 86-0-33) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the elevation of the lowest floor, in relation to mean sea level. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. (STATE RECOMMENDED BUT OPTIONAL)
 - ii. A Building Under Construction Elevation Certificate (FEMA Form 86-0-33) is required after the lowest floor is established. Within seven (7) calendar days of establishment of the lowest floor elevation, it shall be the duty of

the permit holder to submit to the Floodplain Administrator a certification of the elevation of the lowest floor, in relation to mean sea level. Any work done within the seven (7) day calendar period and prior to submission of the certification shall be at the permit holder's risk. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to submit the certification or failure to make required corrections shall be cause to issue a stop-work order for the project. (STATE RECOMMENDED BUT OPTIONAL)

iii. A final as-built Finished Construction Elevation Certificate (FEMA Form 86-0-33) is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the lowest floor and all attendant utilities. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.

(The Finished Construction Elevation Certificate certifier shall provide at least two (2) photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least two (2) additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least 3" × 3". Digital photographs are acceptable. OPTIONAL language)

(THE FEMA ELEVATION CERTIFICATE IS OPTIONAL FOR FLOODPLAIN MANAGEMENT ELEVATION DATA, BUT IS STATE RECOMMENDED. THE USE OF THE FEMA ELEVATION CERTIFICATE IS REQUIRED FOR THE PURCHASE OF FLOOD INSURANCE, AND IS MANDATORY FOR CRS PARTICIPATION.)

b. Floodproofing Certificate. If non-residential floodproofing is used to meet the Flood Protection Elevation requirements, design plans, with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder

to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the lowest floor and all attendant utilities, in relation to mean sea level. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be cause to deny a Floodplain Development Permit. Prior to request for a Certificate of Compliance/Occupancy a Floodproofing Certificate (FEMA Form 086-0-34) shall be provided to the Floodplain Administrator for review and approval.

- c. If a manufactured home is placed within Zone A, AE, AH, or AO and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of Article V, Section B.3.b.
- d. If a watercourse is to be altered or relocated, the following shall all be submitted by the permit applicant prior to issuance of a floodplain development permit:
 - i. a description of the extent of watercourse alteration or relocation; and
 - ii. a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and
 - iii. a map showing the location of the proposed watercourse alteration or relocation; and
 - iv. an Idaho Stream Channel Alteration Permit approval shall be provided by the applicant to the Floodplain Administrator.
- e. Certification Exemptions. The following structures, are exempt from the elevation/floodproofing certification requirements specified in items a. and b. of this subsection:
 - i. Recreational Vehicles meeting requirements of Article V, Section B.5.a;
 - ii. Temporary Structures meeting requirements of Article V, Section B.6; and
 - iii. Accessory Structures less than 200 square feet meeting requirements of Article V, Section B.7.
- 4. Determinations for Existing Buildings and Structures. For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, improvements, repairs of damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:
 - a. Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or

- structure before the start of construction of the proposed work. In the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
- b. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
- c. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
- d. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the adopted Idaho Building Code and this ordinance is required.
- 5. Any other information deemed necessary for review of public safety and floodplain management requirements by the floodplain administrator.

SECTION D. Corrective Procedures

- 1. Violations to be Corrected. When the Floodplain Administrator finds violations of applicable State and local laws, it shall be his or her duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.
- 2. Actions in Event of Failure to Take Corrective Action. If the owner of a building or property shall fail to take prompt corrective action, the Floodplain Administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:
 - a. that the building or property is in violation of the floodplain management regulations;
 - b. that a hearing will be held before the Floodplain Administrator at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
 - c. that following the hearing, the Floodplain Administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as applicable.
- 3. Order to Take Corrective Action. If, upon a hearing held pursuant to the notice prescribed above, the Floodplain Administrator shall find that the building or development is in violation of the Flood Damage Prevention Ordinance, he or she shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than sixty (60) calendar days, nor more than (____) calendar days. (One-hundred-eighty (180) calendar days or less is recommended) Where the Floodplain Administrator finds that there is imminent danger to life or other property, he or she may order that corrective action be taken in such lesser period as may be feasible.

- 4. Appeal. Any owner who has received an order to take corrective action may appeal the order to the local elected governing body by giving notice of appeal in writing to the Floodplain Administrator and the clerk within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the Floodplain Administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.
- 5. Failure to Comply with Order. If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the governing body following an appeal, the owner shall be guilty of a misdemeanor and shall be punished at the discretion of the court.

SECTION E. Variance Procedures

- 1. The {appeal board} as established by {community}, hereinafter referred to as the "appeal board", shall hear and decide requests for variances from the requirements of this ordinance.
- 2. Variances may be issued for:
 - a. the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;
 - b. functionally dependent facilities, if determined to meet the definition as stated in Article II of this ordinance, provided provisions of Article IV, Section E.8.b, c, and d, have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or
 - c. any other type of development, provided it meets the requirements of this Section.
- 3. In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
 - a. the danger that materials may be swept onto other lands to the injury of others;
 - b. the danger to life and property due to flooding or erosion damage;
 - c. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. the importance of the services provided by the proposed facility to the community;
 - e. the necessity to the facility of a waterfront location as defined under Article II of this ordinance as a functionally dependent facility, where applicable;
 - f. the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

- g. the compatibility of the proposed use with existing and anticipated development;
- h. the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- i. the safety of access to the property in times of flood for ordinary and emergency vehicles;
- j. the expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
- k. the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- 4. The applicant shall include a written report addressing each of the above factors in Article IV, Section E.3.a-k with their application for a variance.
- 5. Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this ordinance.
- 6. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official specifying the difference between the Base Flood Elevation (BFE) and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE will result in increased premium rates for flood insurance up to \$25 per \$100 of insurance coverage. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.
- 7. The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administrator and the State of Idaho upon request.
- 8. Conditions for Variances:
 - a. Variances shall not be issued when the variance will make the structure in violation of other Federal, State, or local laws, regulations, or ordinances.
 - b. Variances shall not be issued within any designated floodway if the variance would result in any increase in flood levels during the base flood discharge.
 - c. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - d. Variances shall only be issued prior to development permit approval.
 - e. Variances shall only be issued upon:
 - i. a showing of good and sufficient cause;
 - ii. a determination that failure to grant the variance would result in exceptional hardship; and

- iii. a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- 9. A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.
 - a. The use serves a critical need in the community.
 - b. No feasible location exists for the use outside the Special Flood Hazard Area.
 - c. The lowest floor of any structure is elevated or floodproofed to at least the Flood Protection Elevation.
 - d. The use complies with all other applicable Federal, State and local laws.
- 10. The {insert name of community} will notify the State NFIP Coordinator of the Idaho Department of Water Resources of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.
- 11. Any person aggrieved by the decision of the appeal board may appeal such decision to the Court, as provided in Idaho Code 67-6535.

Article V. PROVISIONS FOR FLOOD HAZARD REDUCTION

Section A. General Standards

In all Special Flood Hazard Areas the following provisions are required:

- 1. All new construction, substantial improvements, and development shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- 2. All new construction, substantial improvements, and development shall be constructed with materials and utility equipment resistant to flood damage in accordance with the Technical Bulletin 2, Flood Damage-Resistant Materials Requirements, and available from the Federal Emergency Management Agency.
- 3. All new construction, substantial improvements, and development shall be constructed by methods and practices that minimize flood damages.
- 4. All new and replacement electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding to the Flood Protection Elevation. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters, and electric outlets/switches.

- 5. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- 6. All new and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into flood waters.
- 7. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- 8. A fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor used solely for parking, access, and storage shall:
 - a. be constructed entirely of flood resistant materials at least to the Flood Protection Elevation; and
 - b. include, in Zones A, AE, AH, and AO, flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:
 - A minimum of two flood openings on different sides of each enclosed area subject to flooding;
 - ii. The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
 - iii. If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;
 - iv. The bottom of all required flood openings shall be no higher than one (1) foot above the interior or exterior adjacent grade;
 - v. Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
 - vi. Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or flood resistant wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.
- 9. Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this ordinance, shall meet the requirements of "new construction" as contained in this ordinance.
- 10. Nothing in this ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this ordinance and located totally or partially within the floodway, or stream setback, provided there is no additional encroachment below the Flood Protection Elevation in the floodway, or stream setback,

- and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.
- 11. New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified in Article IV, Section E.9. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the Flood Protection Elevation and certified in accordance with the provisions of Article IV, Section C.3.
- 12. All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage and determined to be reasonably safe from flooding.
- 13. All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- 14. All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- 15. All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- 16. All subdivision proposals and other development proposals greater than 50 lots or 5 acres, whichever is the lesser, shall include within such proposals base flood elevation data.
- 17. When a structure is partially located in a Special Flood Hazard Area, the entire structure shall meet the requirements for new construction and substantial improvements.
- 18. When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest Base Flood Elevation (BFE) shall apply.
- 19. Fill is prohibited in the SFHA, including construction of buildings on fill. This includes not signing the Community Acknowledgement page for Conditional Letters or Letters of Map Revision (CLOMR-F or LOMR-F). (STATE RECOMMENDED BUT OPTIONAL)

Section B. Specific Standards

In all Special Flood Hazard Areas where Base Flood Elevation (BFE) data has been provided, as set forth in Article III, Section B, or Article V, Section D, the following provisions, in addition to the provisions of Article V, Section A, are required:

1. Residential Construction. New construction, substantial improvements, and development of any residential structure (including manufactured homes) shall have the lowest floor, including basement, and utilities including ductwork, elevated no lower than the Flood Protection Elevation, as defined in Article II of this ordinance.

2. Non-Residential Construction. New construction, substantial improvements, and development of any commercial, industrial, or other non-residential structure shall have the lowest floor, including basement, Residential Construction. New construction, substantial improvements, and development of any residential structure (including manufactured homes) shall have the lowest floor, including basement, and utilities including ductwork, elevated no lower than the Flood Protection Elevation, as defined in Article II of this ordinance, elevated no lower than the Flood Protection Elevation, as defined in Article II of this ordinance. Structures located in Zones A, AE, AH, and AO may be floodproofed to the Flood Protection Elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the Flood Protection Elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. For AH and AO Zones, the floodproofing elevation shall be in accordance with Article V, Section F.2. A registered professional engineer or architect shall certify that the floodproofing standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in Article IV, Section C.3, along with the operational plan and the inspection and maintenance plan.

3. Manufactured Homes.

- a. New and replacement manufactured homes shall be elevated so that the lowest floor of the manufactured home is no lower than the Flood Protection Elevation, as defined in Article II of this ordinance.
- b. Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the Idaho Division of Building Safety's "Idaho Manufactured Home Installation Standard" in accordance with Idaho Code § 44-2201(2). Additionally, when the elevation would be met by an elevation of the chassis thirty-six (36) inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above thirty-six (36) inches in height, an engineering certification is required.
- c. All enclosures or skirting below the lowest floor shall meet the requirements of Article V, Section A.8.(a) and (b).
- d. An evacuation plan must be developed for evacuation of all residents of all new, substantially improved, or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the Floodplain Administrator and the local Emergency Management Coordinator.
- 4. Additions/Improvements.

- a. Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are
 - not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and must not be any more nonconforming than the existing structure; or
 - ii. a substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
- b. Additions to non-compliant post-FIRM structures that are a substantial improvement with no modifications to the existing structure other than a standard door in the common wall shall require only the addition to comply with the standards for new construction.
- c. Additions and/or improvements to non-compliant post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are
 - i. not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction; or
 - ii. a substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
- d. Any combination of repair, reconstruction, rehabilitation, addition, or improvement of a building or structure taking place during a {insert number of years} year period, the cumulative cost of which equals or exceeds 50 percent (50%) of the market value of the structure before the improvement or repair is started, must comply with the standards for new construction. For each building or structure, the {insert number of years} year period begins on the date of the first improvement or repair of that building or structure subsequent to the effective date of this ordinance. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The requirement does not, however, include either:
 - any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assume safe living conditions; or
 - ii. any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.
- 5. Recreational Vehicles. Recreational vehicles shall be either:
 - a. Temporary Placement

i. be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions); or

b. Permanent Placement.

i. Recreational vehicles that do not meet the limitations of Temporary Placement shall meet all the requirements for new construction, as set forth in Article V, Sections A., B.1., and B.3.

6. Temporary Non-Residential Structures.

Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the Floodplain Administrator a plan for the removal of such structure(s) in the event of a flash flood or other type of flood warning notification. The following information shall be submitted in writing to the Floodplain Administrator for review and written approval:

- a. a specified time period for which the temporary use will be permitted. Time specified may not exceed six (6) months, renewable up to one (1) year;
- b. the name, address, and phone number of the individual responsible for the removal of the temporary structure;
- c. the time frame prior to the event at which a structure will be removed (i.e., immediately upon flood warning notification);
- d. a copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and
- e. designation, accompanied by documentation, of a location outside the Special Flood Hazard Area, to which the temporary structure will be moved.
- f. Temporary structures in the floodway must provide a Hydraulic and Hydrology Analysis along with a No-Rise Certification.

7. Accessory and Agricultural Structures (Appurtenant structures).

When accessory structures (sheds, detached garages, etc.) used solely for parking, and storage are to be placed within a Special Flood Hazard Area, elevation or floodproofing certifications are required for all accessory structures in accordance with Article IV, Section C.3, and the following criteria shall be met:

- a. Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking, or restroom areas);
- b. Accessory structures shall not be temperature-controlled;
- c. Accessory structures shall be designed to have low flood damage potential;
- d. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

- e. Accessory structures shall be firmly anchored in accordance with the provisions of Article V, Section A.1;
- f. All utility equipment and machinery, such as electrical, shall be installed in accordance with the provisions of Article V, Section A.4; and
- g. Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below Flood Protection Elevation in conformance with the provisions of Article V, Section A.8.
- h. Accessory structures not used solely for parking, access, and storage must be elevated per Article V. Section B.1. and 2.

An accessory structure with a footprint less than 200 square feet and is a minimal investment of \$_____ (recommend \$7,500 or less) and satisfies the criteria outlined in a - g above is not required to provide the elevation certificate per Article V, Section B.2.

8. Tanks.

When gas and liquid storage tanks are to be placed within a Special Flood Hazard Area, the following criteria shall be met:

- Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the base flood, including the effects of buoyancy (assuming the tank is empty);
- b. Elevated above-ground tanks, in flood hazard areas shall be attached to and elevated to or above the design flood elevation on a supporting structure that is designed to prevent flotation, collapse, or lateral movement during conditions of the base flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area;
- c. Not elevated above-ground tanks may be permitted in flood hazard areas provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.
- d. Tank inlets, fill openings, outlets and vents shall be:
 - at or above the flood protection elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the base flood; and
 - ii. anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.
- 9. Construction of Below-Grade Crawlspace.
 - The interior grade of a crawlspace must not be below the BFE and must not be more than two (2) feet below the exterior lowest adjacent grade (LAG).

- The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, must not exceed four (4) feet at any point.
- c. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event.
- d. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace.

See Technical Bulletin 11 for further information.

Caution:

Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction, with the interior elevation of the crawlspace soil at or above the Base Flood Elevation (BFE).

10. Subdivision plats.

Flood zones.

- a. A note must be provided on the final plat documenting the current flood zone in which the property or properties are located. The boundary line must be drawn on the plat in situations where two or more flood zones intersect over the property or properties being surveyed.
- b. FEMA FIRM panel(s): #160xxxxxxC, & 160xxxxxxE, etc. FIRM effective date(s): mm/dd/year Flood Zone(s): Zone X, Zone A, Zone AE, A Zone AO, Zone, AH, Zone D, etc. Base Flood Elevation(s): AE ______.0 ft., etc. Flood Zones are subject to change by FEMA & all land within a floodway or floodplain is regulated by ______ chapter/section of the City/County Code. (STATE RECOMMENDED BUT OPTIONAL)

11. Critical Facilities:

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet (3') above BFE or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

As a best practice, FEMA recommends protection that exceeds code minimums. For example, FEMA 543, Design Guide for Improving Critical Facility Safety from Flooding and High Winds (2007) recommends protecting critical facilities to withstand at least a 0.2-

percent-annual-chance flood event (often called the "500-year flood event"). Flood elevations for the 0.2-percent-annual-chance flood may be greater than the elevation specified by ASCE 24. If federal funding or other Federal action is involved, the requirements of Executive Order 11988 — Floodplain Management may necessitate protection of critical actions to the 500-year flood elevation (critical actions may include the construction and repair of critical facilities). (STATE RECOMMENDED BUT OPTIONAL)

In existing facilities that have not been substantially damaged, it may not be possible to floodproof or elevate to provide protection from the 0.2-percent-annual-chance flood event. In those instances, floodproofing or elevating as high as practical is recommended.

Three (3) feet is State-recommendation, greater than three (3) feet is OPTIONAL.

- 12. Floodplain Development Permits Related to Irrigation Activities and Development.
 - a. Activities that do not require a floodplain development permit

Consistent with Idaho Code §46-1021 and §46-1022, operation, cleaning, maintenance or repair of any ditch, canal, lateral, drain, diversion structure or other irrigation or drainage works, as defined within this guidance document, do not constitute development under Idaho law and therefore do not require either a GIFD permit or an individual permit. The below list of activities delineates some activities that do not require a permit. The list is not exhaustive. The Floodplain Administrator must exercise their professional judgement when reviewing activities to determine if an activity requires a permit. When in doubt, the Floodplain Administrator should seek consultation from the IDWR Floodplain Coordinator to determine permit necessity.

- 1. General farming, pasture, horticultural activities, and forestry that do not involve earthwork that permanently alters the topography or any clearing/grubbing of an area.
- 2. Grading of existing roads or easements along or near channels and within the SFHA, provided that the grading does not add fill within the regulatory floodway or SFHA.
- 3. Maintenance of underground utilities (work must not permanently alter topography).
- 4. In-kind replacement of existing piers or posts supporting a conforming deck.
- 5. Activities associated with land-surface construction stormwater Best Management Practices ("BMP"), provided the measures are temporary in nature (i.e. not in place for longer than 180 days) or do not increase the BFE. Examples of stormwater BMP activities that do not require a permit include the following: dust control; materials and equipment covers; mulching; geotextile fabrics; matting; bio-filter bags; fiber rolls; silt fences; vegetative buffer strips; temporary swales; and temporary berms.
- 6. New installation or maintenance of non-solid fences constructed parallel to the flow of water during a flood event. Non-parallel or solid fences that block the flow will need to go through the individual permitting process.

b. General Irrigation Floodplain Development Permit

Upon review of the proposed activities and projects, the Floodplain Administrator will assess whether or not they fall, in whole or in part, under the GIFD permit, and whether any components require an individual permit and notify the applicant in writing accordingly.

The Floodplain Administrator shall advise the applicant or project sponsor of their assessment via written notice (email is preferable). The Floodplain Administrator shall maintain a copy of all proposed project notifications and responses.

The GIFD permit does NOT include the following types of development activities and projects:

- Fill, except as outlined in the examples below;
- new construction, or replacements that do not meet the in-kind definition;
- activities or projects that trigger any requirement found in the local floodplain management or NFIP regulations; and
- activities or projects that increase flood damage and/or increase exposure to flood hazards.

GIFD permit activities and projects:

- 1. Dredging and grading of irrigation and drainage channels, provided that fill from dredging or grading is not deposited on the banks of channels or anywhere within the regulatory floodway or SFHA for longer than 10 days.
- 2. Seasonal grading within natural stream channels to check or direct water into irrigation facilities (i.e. earthen "push-up dams" and "wing dams").
- 3. Deposition of fill within the SFHA for less than 10 days. After 10 days, deposited fill must be removed from the SFHA, or graded and compacted to existing grade within \pm 0.2 feet. Deposition of fill includes deposition of material resulting from grading or excavating irrigation or drainage channels. Deposition of fill within the mapped floodway requires an individual permit.
- 4. Construction of new underground utilities that do not permanently alter the topography. Excess soil from new pipes larger than 2 feet in diameter must be disposed of outside the regulatory floodway and SFHA.
- 5. In-kind replacement of irrigation and drainage works or components including but not limited to control gates or head gates, measuring devices and their housing structures/stilling wells, culverts, pumps, pipes, flumes, siphons and similar works. GIFD permits cannot authorize the In-kind replacement of dams or bridge structures.
- 6. New driveways, trails, sidewalks, roads and streets constructed completely ator-below existing grade.
- 7. New underground utilities that do not permanently alter the existing grade elevations by \pm 0.5 feet.

- 8. Armoring, stabilizing, securing, or in-kind replacement of existing infrastructure within the channel banks (such as bridge piers, sewer/utility supports and storm water/sewer drainage outfalls/headwalls) provided the dimensions (bank slopes, channel location, channel elevation) of the channel are not altered. This should not involve replacement with larger or additional above ground infrastructure.
- c. Individual Floodplain Development Permits.

 An individual permit is required for all other permitted activities and projects within the regulatory floodway and SFHA that do not meet the requirements of a GIFD permit. (STATE RECOMMENDED BUT OPTIONAL)
- 13. Compensatory Storage: New development shall not reduce the effective flood storage volume of the Regulatory Floodway and SFHA. A development proposal shall provide compensatory storage if grading or other activity eliminates any effective flood storage volume. Compensatory storage shall:
 - a. Provide equivalent volume at equivalent elevations to that being displaced. For this purpose, "equivalent elevation" means having similar relationship to ordinary high water and the best available one hundred (100) year water surface profiles;
 - b. Be hydraulically connected to the source of flooding; and
 - c. Provide compensatory storage in the same construction season as when the displacement of flood storage volume occurs and before the flood season begins.
 - d. The newly created storage area shall be graded and vegetated to allow fish access during flood events without creating fish stranding sites. (STATE RECOMMENDED BUT OPTIONAL)
- 14. Pit, Mine, Quarry, or Gravel Extraction: Approval of a CLOMR shall be required as a condition of approval for any proposed pit, mine, quarry, or gravel extraction. The CLOMR application shall demonstrate that the extraction site will be designed to avoid river avulsion (the sudden separation of land from one property and its attachment to another, especially by flooding or a change in the course of a river). FEMA must approve the CLOMR prior to commencement of the use or breaking ground. Gravel mining operations or excavations are not permitted within one hundred feet (100') of the top of river bank regardless of floodway or floodplain designation. Material stockpiles and permanently installed structures shall not be located within the regulatory floodway. (STATE RECOMMENDED BUT OPTIONAL)

Section C. Standards for Floodplains without Established Base Flood Elevations

Within the Special Flood Hazard Areas designated as Zone A (also known as Unnumbered A Zones) and established in Article III, Section B, where no Base Flood Elevation (BFE) data has been provided by FEMA, the following provisions, in addition to the provisions of Article V, Section A, shall apply:

The BFE used in determining the Flood Protection Elevation (FPE) shall be determined based on the following criteria:

- When Base Flood Elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this ordinance and shall be elevated or floodproofed in accordance with standards in Article V, Sections A and B.
- 2. When floodway data is available from a Federal, State, or other source, all new construction and substantial improvements within floodway areas shall also comply with the requirements of Article V, Sections B and E.
- 3. Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data. Such Base Flood Elevation (BFE) data shall be adopted by reference in accordance with Article III, Section B and utilized in implementing this ordinance. The applicant/developer shall submit an application for a Conditional Letter of Map Revision (CLOMR) prior to Preliminary Plat approval and have obtained a Letter of Map Revision (LOMR) prior to any building permits for structures being issued. (Optional)

See FEMA 480 and/or FEMA 265 for further information

4. When Base Flood Elevation (BFE) data is not available from a Federal, State, or other source as outlined above, the lowest floor shall be elevated or floodproofed (non-residential) to two feet (2.0 ft.) above the Highest Adjacent Grade (HAG) at the building site or to the Flood Protection Elevation (FPE) whichever is higher, as defined in Article II. All other applicable provisions of Article V, Section B shall also apply.

Section D. Standards for Riverine Floodplains with Base Flood Elevations but without Established Floodways.

Along rivers and streams where Base Flood Elevation (BFE) data is provided by FEMA or is available from another source but floodways are not identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

- 1. Standards of Article V, Sections A and B; and
- 2. Until a regulatory floodway is designated, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

Section E. Standards for Floodways.

Areas designated as floodways located within the Special Flood Hazard Areas established in Article III, Section B. The floodways are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Article V, Sections A and B, shall apply to all development within such areas:

- 1. No encroachments, including fill, new construction, substantial improvements, and other developments shall be permitted unless:
 - a. it is demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Floodplain Administrator prior to issuance of floodplain development permit (*This is a No-Rise Analysis & Certification*); or
 - a Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A
 Letter of Map Revision (LOMR) must also be obtained within six months of
 completion of the proposed encroachment.
- 2. If Article V, Section E.1 is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this ordinance.
- 3. Manufactured homes may be permitted provided the following provisions are met:
 - a. the anchoring and the elevation standards of Article V, Section B.3; and
 - b. the encroachment standards of Article V, Section E.1.
- 4. Other Development in regulated floodways.
 - a. Fences that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, in regulated floodways shall meet the limitations of Article V, Section E of this ordinance.
 - b. Retaining walls, bulkheads, sidewalks, and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Article V, Section E of this ordinance.
 - c. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings, and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, which encroach into regulated floodways, shall meet the limitations of Article V, Section E of this ordinance. The applicant/developer shall submit an application for a Letter of Map Revision (LOMR) upon completion of construction for the purpose of providing FEMA better available data. (STATE RECOMMENDED BUT OPTIONAL)
 - d. Drilling water, oil, and/or gas wells including fuel storage tanks, apparatus, and any equipment at the site that encroach into regulated floodways shall meet the limitations of Article V, Section E of this ordinance.

- e. Docks, piers, boat ramps, marinas, moorings, decks, docking facilities, port facilities, shipbuilding, and ship repair facilities that encroach into regulated floodways shall meet the limitations of Article V, Section E of this ordinance
- f. Gravel and sand and their subsequent extraction on lands within the Special Flood Hazard Area that encroach into regulated floodways shall meet the limitations of Article V, Section E of this ordinance. A Reclamation Plan Bond for LOMR shall be posted by the mine/property owner with {insert name of community} to cover the estimated costs of a Reclamation LOMR as determined by the mine/property owner and shall provide supporting documentation for the estimated LOMR cost. A Reclamation LOMR shall be completed within one year of the completion of mining. Upon failure of the property owner to obtain a Reclamation LOMR of the mining site within one year, the Reclamation Plan Bond for LOMR will be forfeited. (STATE RECOMMENDED BUT OPTIONAL)

Section F. Standards for Areas of Shallow Flooding (Zone AO, AH, AR/AO, or AR/AH)

Areas designated as shallow flooding areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Article V, Sections A and B, all new construction and substantial improvements shall meet the following requirements:

- 1. The lowest floor shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of {insert number} feet, above the highest adjacent grade; or at least {insert number} feet above the highest adjacent grade if no depth number is specified. A minimum of two (2) feet is required and four (4) feet is recommended where a depth is not provided.
- Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in Article V, Section F.1 so that the structure, together with attendant utility and sanitary facilities, below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required in accordance with Article IV, Section C.3, and Article V, Section B.2.
- 3. Accessory structure (appurtenant structure) (sheds, detached garages, etc.)
 - a. Used solely for parking, and storage
 - i. Shall have the lowest floor elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of {insert number} feet, above the highest adjacent grade; or at least {insert number} feet above the highest adjacent grade if no depth number is specified. A minimum of two (2) feet is required and four (4) feet is recommended where a depth is not provided; or

- ii. Shall have flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below Flood Protection Elevation in conformance with the provisions of Article V, Section A.8.
- b. Not used solely for parking, and storage
 - i. Shall be elevated per Article V. Section B.1. and 2.
- 4. Adequate drainage paths shall be provided around structures on slopes to guide floodwaters around and away from proposed structures.
- 5. Hazardous Velocities: Where hazardous velocities are noted on the FIRM, proper construction techniques and methods shall be used to mitigate the effects of the velocities.

Section G. Standards for possible but undetermined flood hazards, as no analysis of flood hazards has been conducted (D Zone):

- A. General Standards:
 - 1. All development within a D zone shall be subject to the procedural requirements of this ordinance, as applicable; and
 - 2. Drainage: Adequate drainage paths around structures on slopes shall be provided in a D zone to guide floodwaters around and away from proposed structures.
 - 3. Grading: Any site work in excess of ten (10) cubic yards of cut or fill will require a detailed grading permit. All grading shall be done so as to minimize impacts and maintain compensatory storage within all special flood hazard areas. Depending on the extent and nature of the grading, a LOMC may be required.
 - 4. Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data. Such Base Flood Elevation (BFE) data shall be adopted by reference in accordance with this ordinance and utilized in implementing this ordinance. The applicant/developer shall submit an application for a Conditional Letter of Map Revision (CLOMR) prior to Preliminary Plat approval and have obtained a Letter of Map Revision (LOMR) prior to any building permits for structures being issued.

See FEMA 480 and/or FEMA 265 for further information

5. When Base Flood Elevation (BFE) data is not available from a Federal, State, or other source as outlined above, the lowest floor shall be elevated or floodproofed (non-residential) to two feet (2.0 ft.) above the Highest Adjacent Grade (HAG) at the building site or to the Flood Protection Elevation (FPE) whichever is higher, as defined in this ordinance. All other applicable provisions of Article V, Section A and B shall also apply. (STATE RECOMMENDED BUT OPTIONAL)

Article VI. LEGAL STATUS PROVISIONS

Section A. Effect on Rights and Liabilities under the Existing Flood Damage Prevention Ordinance

This ordinance, in part, comes forward by re-enactment of some of the provisions of the Flood Damage Prevention Ordinance enacted {adoption date of the community's initial Flood Damage Prevention Ordinance} as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit, or proceeding instituted or pending. All provisions of the Flood Damage Prevention Ordinance of {insert name of community} enacted on {adoption date of the community's initial Flood Damage Prevention Ordinance}, as amended, which are not reenacted herein are repealed.

Section B. Effect upon Outstanding Floodplain Development Permits

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a Floodplain Development Permit has been granted by the Floodplain Administrator or his or her authorized agents before the time of passage of this ordinance. Provided, however, that when construction is not begun under such outstanding permit within a period of 180 days subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

Section C. Severability

The ordinance is hereby declared to be severable. Should any portion of this ordinance be declared invalid by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect and shall be read to carry out the purpose(s) of the ordinance before the declaration of partial invalidity.

Section D. Effective Date

This ordinance shall become effective {insert date; based upon adoption, or a specific date; or
passage and publication as provided by law}.
Enacted by the {Board, Council, etc.} as an ordinance of the {insert name of community} on the day of, 201
Approved by {insert name and title of chief elected official} on the day of, 201
{INSERT NAME OF COMMUNITY}
{insert name and title of chief elected official}
ATTEST:
{insert name of clerk}, {City/County} Clerk