

ORDINANCE NO. 1479

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ARCATA AMENDING THE ARCATA MUNICIPAL CODE PERTAINING TO FLOOD HAZARD MITIGATION STANDARDS

The City Council of the City of Arcata does ordain as follows:

Section 1: Title VII—Building Regulations, Chapter 4—Flood Hazard Mitigation Standards of the Arcata Municipal Code is hereby adopted as follows:

TITLE VIII—Building Regulations CHAPTER 4—Flood Hazard Mitigation Standards

SEC. 8400. Purpose.

The provisions of this Chapter are intended to protect the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by minimum floodplain standards designed:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To insure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To insure that those who occupy the areas of special flood hazard assume responsibility for their actions.

This Chapter also implements regulations to meet Federal Emergency Management Agency (FEMA) requirements for managing flood hazards.

SEC. 8401. Definitions. Unless a provision explicitly states otherwise, the following terms and phrases, as used in the Chapter, are defined as follows:

"A zone" means "Special flood hazard area," as defined herein.

"Accessory structure" means a structure that is either:

- A. Solely for the parking of no more than 2 cars; or
- B. A small, low cost shed for limited storage, less than 150 square feet and \$1,500 in value.

"Accessory use" means a use which is incidental and subordinate to the principal use of the parcel of land on which it is located.

"Alluvial fan" means a geomorphologic feature characterized by a cone or fan-shaped deposit of boulders, gravel, and fine sediments that have been eroded from mountain slopes, transported by flood flows, and then deposited on the valley floors, and which is subject to flash flooding, high velocity flows, debris flows, erosion, sediment movement and deposition, and channel migration.

"Apex" means a point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

"Area of shallow flooding" means a designated AO, AH or Zone on the Flood Insurance Rate Map (FIRM). The base flood depth ranges from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

"Area of special flood hazard" means "Special flood hazard area" as defined herein.

"Base flood" means a flood which has a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood"). Base flood is the term used throughout this Chapter.

"Base flood elevation" (BFE) means the elevation shown on the Flood Insurance Rate Map for Zones AE, VE, and B and C that indicates the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

"Basement" means any area of a building having its floor subgrade—i.e. below ground level—on all sides.

"Breakaway wall" means any type of wall, whether solid or lattice, and constructed of concrete, masonry, wood, metal, plastic or any other suitable building material that is not part of the structural support of the building, and is designed to break away under abnormally high tides or wave action without causing any damage to the structural integrity of the building on which they are used or any building to which they might be carried by flood waters. A breakaway wall shall have a safe design loading resistance of not less than ten and no more than twenty pounds per square foot. The use of breakaway walls must be certified by a registered civil engineer or architect and shall meet the following conditions:

- A. Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
- B. The elevated portion of the building shall not incur structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.

"Building" means "Structure."

"Coastal High Hazard Area" means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. It is an area subject to high velocity waters, including

coastal and tidal inundation or tsunamis. The area is designated on a Flood Insurance Rate Map (FIRM) as Zone VE, or V.

"Development" means 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.

"Encroachment" means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain which may impede or alter the flow capacity of a floodplain.

"Exception" means a grant of relief from the requirements of this Chapter pursuant to Section 8406, which permits construction in a manner that would otherwise be prohibited by this Chapter.

"Existing manufactured home park or subdivision" means a manufactured home park or subdivision for which 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 either final site grading or the pouring of concrete pads) is completed before November 4, 2016 .

"Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured 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, flooding, or flood water" means:

- A. A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and/or mudslides (i.e., mudflows); and
- B. The condition resulting from flood-related erosion.

"Flood Boundary, and Floodway Map (FBFM)" means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the floodway.

"Flood Insurance Rate Map (FIRM)" means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"Flood Insurance Study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the FIRM, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.

"Floodplain or flood-prone area" means any land area susceptible to being inundated by water from any source—see "Flooding."

"Floodplain Administrator" is the community official designated by title to administer and enforce the floodplain management regulations .

"Floodplain management" means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, flood plain management regulations and open space plans.

"Floodplain management regulations" means Chapter 4 of Title VIII of the Arcata Municipal Code and any zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading ordinance and erosion control) and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination, which provide standards for the purpose of flood loss and damage prevention and reduction.

"Floodproofing" means 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. For guidelines on dry and wet floodproofing, see FEMA Technical Bulletins TB 1-93, TB 3-93 and TB 7-93.

"Floodway" means 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 one foot. Also referred to as "Regulatory Floodway."

"Floodway fringe" means that area of the floodplain on either side of the "Regulatory Floodway" where encroachment may be permitted.

"Fraud and victimization" as related to Section 8406 of this Chapter, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the City of Arcata will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for fifty to one-hundred years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.

"Functionally Dependent Use" means a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

"Governing body" means the City Council of the City of Arcata.

"Hardship" as related to Section 8406 of this Chapter means the exceptional hardship that would result from a failure to grant the requested exception. The City of Arcata requires that the exception be unusual and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting an exception, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Historic structure" means any structure that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the 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 a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs.

"Levee" means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

"Levee system" means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accord with sound engineering practices.

"Lowest floor" means the lowest floor of the lowest enclosed area, including basement (see "Basement," defined herein).

- A. An unfinished or flood resistant enclosure below the lowest floor that is 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 it conforms to applicable non-elevation design requirements, including, but not limited to:
 1. The flood openings standard in Section 8405.A.5;
 2. The anchoring standards in Section 8405.A.1;
 3. The construction materials and methods standards in Section 8405.A.2; and
 4. The standards for utilities in Section 8405.B.
- B. For residential structures, all subgrade enclosed areas are prohibited as they are considered to be basements (see "Basement" defined herein). This prohibition includes below-grade garages and storage areas.

"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

“Mean Sea Level” means for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, the North American Vertical Datum (NAVD) of 1988, or other data, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

“National Flood Insurance Program (NFIP)” means the federal program that authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

“New construction” means, for purposes of this Chapter, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by this community.

“New manufactured home park or subdivision” means a manufactured home park or subdivision for which 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 either final site grading or the pouring of concrete pads) is completed on or after November 5, 2016.

“Obstruction” includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

“100-Year Flood” means "base flood."

“Primary frontal dune” means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively mild slope.

“Program deficiency” means a defect in a community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management regulations.

“Public safety and nuisance” means, for purposes related to Section 8406 of this Chapter, that the granting of a variance must not result in anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

“Recreational vehicle” means a vehicle which is:

- A. Built on a single chassis;
- B. 400 square feet or less when measured at the largest horizontal projection;
- C. Designed to be self-propelled or permanently towable 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" means 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 one foot.

"Remedy a violation" means 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 noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the Article or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

"Riverine" means relating to, formed by, or resembling a river (including tributaries), street, brook, etc.

"Sand dunes" means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

"Special Flood Hazard Area (SFHA)" means an area in the floodplain subject to a one percent or greater chance of flooding in a given year. It is shown on an FHBMR or FIRM as Zones A, AE, V, VE or X.

"Start of construction" includes substantial improvement and other proposed new development, 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" means a walled and roofed building that is principally above ground; this includes a gas or liquid storage tank or a manufactured home.

"Substantial damage" means 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 of the market value of the structure before the damage occurred.

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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 or 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."

The Floodplain Administrator shall utilize the FEMA publication: "Substantial Improvement/Substantial Damage Desk Reference *FEMA P-758 / May 2010*," as amended or replaced by additional FEMA publication for guidance in identifying substantial improvements..

"Variance" means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

"Violation" means 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 elevation certificate, other certifications, or other evidence of compliance required in this Article is presumed to be in violation until such time as that documentation is provided.

"Water surface elevation" means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

"Watercourse" means a lake, river, creek, stream, wash, arroyo, 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.

SEC. 8402. Applicability.

A. Basis for establishing areas of special flood hazards. The areas of special flood hazard identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled "Flood Insurance Study" for the City of Arcata dated November 5, 1997, and accompanying Flood Insurance Rate Maps (FIRMS), and the Humboldt County Flood Insurance Rate Map Index dated February 8, 1999, and Flood Insurance Study dated August 5, 1986 and Flood Boundary and Floodway Maps, and all subsequent amendments and/or revisions are hereby adopted by reference and declared to be a part of this Land Use Code, and this Chapter. This Flood Insurance Study and attendant mapping is the minimum area of applicability of this Chapter and may be supplemented by studies for other areas which allow implementation of this Chapter and which are recommended to the City of Arcata by the Flood Plain Administrator. The Flood Insurance Study is on file at the Engineering Department of the City of Arcata

B. Compliance with Chapter required. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Chapter, and other applicable regulations including the City of Arcata Land Use Code (LUC). Violations of the provisions of this Chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) may constitute a misdemeanor, and be charged by the City Attorney as either an infraction or misdemeanor. Nothing herein shall prevent the City from taking lawful action as is necessary to prevent or remedy any violation.

C. Abrogation and greater restrictions. This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and another regulation, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

D. Interpretation. In the interpretation and application of this Chapter, 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.

E. Warning and disclaimer of liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Chapter does not imply that land outside the areas of special flood hazards, or uses permitted within such areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of the City of Arcata, any officer or employee thereof, the Federal Emergency Management Agency, or State of California, for any flood damages that result from reliance on this Chapter or any administrative decision lawfully made in compliance with this Chapter.

SEC. 8403. Administration.

A. Designation of Floodplain Administrator. The City Engineer is hereby appointed to administer, implement, and enforce this Chapter by granting or denying development permits in accordance with its provisions.

B. Duties and responsibilities of Floodplain Administrator. The Floodplain Administrator shall have the following duties and responsibilities.

1. **Permit review.** The Floodplain Administrator shall review all development permits to determine that:
 - a) The permit requirements of this Chapter have been satisfied including determination of substantial improvement and substantial damage of existing structures;
 - b) All other required state and federal permit requirements have been obtained;
 - c) The site is reasonably safe from flooding;
 - d) The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this Chapter, "adversely affects" means that the cumulative effect of the proposed development when combined with all other existing and anticipated development will increase the water surface elevation of the base flood more than one foot at any point; and
 - e) All Letters of Map Revision (LOMR's) for flood control projects are approved prior to the issuance of building permits. Building permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

2. **Notification of Other Agencies.** Other agencies shall be notified as follows for the following circumstances:

a) Alteration or relocation of a watercourse:

- (1) Notify adjacent communities and the California Department of Water Resources prior to alteration or relocation;
- (2) Submit evidence of such notification to the Federal Emergency Management Agency; and
- (3) Assure that the flood carry capacity within the altered or relocated portion of said watercourse is maintained.

b) Base Flood Elevation changes due to physical alterations:

- (1) Within 6 months of information becoming available or project completion, whichever comes first, the Floodplain Administrator shall submit or assure that the permit applicant submits technical or scientific data to FEMA for a Letter of Map Revision (LOMR).
- (2) All LOMR's for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

Such submissions are necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements are based on current data.

c) Changes in Corporate Boundaries. Notify FEMA in writing whenever the corporate boundaries have been modified by annexation or other means and include a copy of the map of the community clearly delineating the new corporate limits.

3. **Certifications.** Obtain and maintain for public inspection and make available as needed the certifications required by Section 8405 (Standards for Flood Hazard Reduction).

4. **Interpretations.** Make interpretations where needed, as to the location of the boundaries of the areas of special flood hazards. Where there appears to be a conflict between a mapped boundary and actual field conditions, grade and base flood elevations shall be used to determine the boundaries of the special flood hazard area. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation provided in Section 8406 (Flood Standard Exceptions).

5. **Base flood elevation data.** When base flood elevation data has not been provided in accordance with Section 8402.A (Basis for establishing areas of special flood hazards), the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal or state agency, or other source, in the administration and review process.

C. Enforcement. Take action to remedy violations of this Chapter as specified in this Chapter or other applicable law.

SEC. 8404. Permit Requirements.

A Development Permit shall be obtained before construction or development within any area of special flood hazard identified in compliance with Section 8402.A (Basis for establishing areas of special flood hazards). Application for a Development Permit shall include:

- A. Plans in duplicate, drawn to scale, showing:
 1. Location, dimensions, and elevation of the area in question, existing or proposed structures, storage of materials and equipment and their location;
 2. Proposed locations of water supply, sanitary sewer, and other utilities;
 3. Grading information showing existing and proposed contours, any proposed fill, and drainage facilities;
 4. Location of the regulatory floodway when applicable;
 5. Base flood elevation information as specified in Section 8403.B.5;
 6. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; and
 7. Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed, as required in Section 8405.A.4.
- B. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
- C. Proposed elevation in relation to mean sea level to which any structure will be floodproofed if required in Section 8405.A.4 (Elevation and floodproofing - Nonresidential construction), that is also in compliance with all applicable City regulations including those in the Land Use Code (LUC).
- D. All appropriate certifications required by this Chapter;
- E. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and
- F. Documentation of CEQA compliance for all discretionary projects.

SEC. 8405. Standards for Flood Hazard Reduction

A. Construction standards. The following standards apply in all areas of special flood hazards.

1. Anchoring.
 - (a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
 - (b) All manufactured homes shall meet the anchoring standards of 8405.D (Mobile homes, manufactured homes, and mobile home parks and subdivisions).
2. Construction materials and methods.

- a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- c) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- d) Within Zones AH or AO, adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures are required.

3. **Elevation and flood proofing—Residential construction.** Upon completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered civil engineer or licensed surveyor, and verified by the Building Inspector, to be properly elevated. The certification and verification shall be provided to the Floodplain Administrator.

All new construction or substantial improvements of residential structures shall have the lowest floor, including basement:

- a) In AE Zones, elevated at least one foot above the base flood elevation.
- b) In an AO Zone, elevated above the highest adjacent grade to a height at least one foot above the depth number specified in feet on the FIRM, or elevated at least 2 feet above the highest adjacent grade if no depth number is specified.
- c) In an A Zone, without BFE's specified on the FIRM (unnumbered A Zone), elevated at least one foot above the base flood elevation, as determined under Section 9.60.050.B.5.
- d) Manufactured homes shall also meet the standards in Subsection D.

4. **Elevation and flood proofing—Nonresidential construction.** Nonresidential construction, new or substantial Improvements, shall either be elevated to conform with Subsection A.3, above (Elevation and flood proofing—Residential construction), or:

- a) Be flood proofed, together with attendant utility and sanitary facilities, below the elevation specified in Subsection A.3, so that the structure is watertight with walls substantially impermeable to the passage of water; and
- b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, and;
- c) Be certified by a registered civil engineer or licensed surveyor that the standards of this subsection are satisfied. The certification shall be provided to the Floodplain Administrator.

5. **Flood Openings.** All new construction and substantial improvements of structures with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be

designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for automatic entry and exit of floodwater. Designs for meeting this requirement must meet the following minimum criteria:

- a) For non-engineered openings:
 - (1) Have a minimum of two openings on different sides having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (2) The bottom of all openings shall be no higher than one foot above grade;
 - (3) Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwater; and
 - (4) Buildings with more than one enclosed area must have openings on exterior walls for each area to allow flood water to directly enter; or
- b) Be certified by a registered civil engineer or architect.

6. Garages and low cost Accessory Structures.

- a) Attached Garages.
 - (1) A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry of flood waters. See Subsection 8405.A.5. Areas of the garage below the BFE must be constructed with flood resistant materials. See Subsection 8405.A.2.
 - (2) A garage attached to a nonresidential structure must meet the above requirements or be dry floodproofed. For guidance on below grade parking areas, see FEMA Technical Bulletin TB-6.
- b) Detached garages and accessory structures.
 - (1) “Accessory structures” used solely for parking (2 car detached garages or smaller) or limited storage (small, low-cost sheds), as defined in 8401, may be constructed such that its floor is below the base flood elevation (BFE), provided the structure is designed and constructed in accordance with the following requirements:
 - i. Use of the accessory structure must be limited to parking or limited storage;
 - ii. The portions of the accessory structure located below the BFE must be built using flood-resistant materials;
 - iii. The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;
 - iv. Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the BFE;
 - v. The accessory structure must comply with floodplain encroachment provisions in Subsection 8405.F; and
 - vi. The accessory structure must be designed to allow for the automatic entry of

flood waters in accordance with Subsection 8405.F.

- (2) Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 8405.

B. Utilities. All new and replacement water supply and sanitary sewage systems shall be designed to prohibit the infiltration of flood waters into the system and discharge from systems into flood waters. On-site waste disposal systems shall be located to avoid impairment to them, or contamination from them during flooding.

C. Subdivisions.

1. All new subdivision proposals and other proposed development, including proposals for manufactured home parks and subdivisions, greater than 50 lots or 5 acres, whichever is the lesser, shall:
 - a) Identify the Special Flood Hazard Areas (SFHA) and Base Flood Elevations (BFE).
 - b) Identify the elevations of lowest floors of all proposed structures and pads on the final plans.
 - c) If the site is filled above the base flood elevation, the following as-built information for each structure shall be certified by a Registered Civil Engineer or Licensed Land Surveyor and provided as part of an application for a Letter of Map Revision based on Fill (LOMR-F) to the Floodplain Administrator;
 - (1) Lowest floor elevation.
 - (2) Pad elevation.
 - (3) Lowest adjacent grade.
2. All subdivision proposals and other proposed development shall be consistent with the need to minimize flood damage.
3. All subdivision proposals and other proposed development shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
4. All subdivisions and other proposed development shall provide adequate drainage to reduce exposure to flood hazards.

D. Mobile homes, manufactured homes, and mobile home parks and subdivisions.

1. All manufactured homes that are placed or substantially improved on sites located: (1) outside of a manufactured home park or subdivision; (2) in a new manufactured home park or subdivision; (3) in an expansion to an existing manufactured home park or subdivision; or (4) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall:
 - a) Within Zones A, AH, and AE on the community's Flood Insurance Rate Map, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
 - b) Within Zones V, and VE on the community's Flood Insurance Rate Map, meet the requirements of Section 8405.G.

2. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A, AH, AE, V, and VE on the community's Flood Insurance Rate Map that are not subject to the provisions of Subsection 8405.D.1 will be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement, and be elevated so that either:
 - a) Lowest floor of the manufactured home is at or above the base flood elevation; or
 - b) Manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.

Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a Registered Civil Engineer or Licensed Land Surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

E. Recreational vehicles.

1. Each recreational vehicle placed on a site within Zones A, AH, and AE on the Flood Insurance Rate Map shall either:
 - a) Be on the 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 security devices, and has no permanently attached additions), or
 - b) Meet the permit requirements of Section 8404 (Permit Requirements), and the elevation and anchoring requirements for manufactured homes in Subsection D.
2. A recreational vehicle placed on sites within Zones V and VE on the Flood Insurance Rate Map shall comply with the requirements of Subsections F.1, and G.

F. Floodways. Within the areas of special flood hazard established in Section 8402.A (Applicability—Basis for establishing areas of special flood hazards), are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

1. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered civil engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
2. If the requirements of this Subsection F are satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of this Chapter.

Until a regulatory floodway is adopted, no new construction, substantial development, or other development (including fill) shall be permitted within Zones A and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than 1 foot at any point within the City of

Arcata.

G. Coastal High Hazard Areas. Unless exempted by General Plan: 2020 policies PS-4b, PS-4g, and any other applicable City regulation or standard, it is the general policy of the City not to allow any development in the area identified as Coastal Flooding (V Zones) on the FIRM Map.

H. Exceptions. The improvement, repair, or rehabilitation of an existing residential building or structure, or an existing nonresidential building or structure built prior to May 2, 1983, where the cost of the improvement, repair, or rehabilitation does not equal or exceed 50 percent of the replacement cost of the structure shall not be subject to the standards and requirements of this Section. In all circumstances, exceptions may be made only in accordance with the requirements in Section 8406 (Flood Standard Exceptions), in compliance with Section 60.6 of the National Flood Insurance Program Regulations, Federal Emergency Management Agency, Federal Insurance Administration and in California Administrative Code Title 14 for Coastal Zone Areas.

SEC. 8406. Flood Standard Exceptions.

The issuance of an exception is for floodplain management purposes only. Insurance premium rates are determined by statute according to actuarial risk and will not be modified by the granting of an exception.

The variance criteria set forth in this section of the ordinance are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this ordinance would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the City of Arcata to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level are so serious that exceptions from the flood elevation or from other requirements in the flood ordinance are quite rare. The long term goal of preventing and reducing flood loss and damage can only be met if exceptions are strictly limited. Therefore, the exception guidelines provided in this ordinance are more detailed and contain multiple provisions that must be met before an exception can be properly granted. The criteria are designed to screen out those situations in which alternatives other than an exception are more appropriate.

Exceptions to Section 8405 (Standards for Flood Hazard Reduction) may be granted by the Floodplain Administrator in compliance with the following provisions.

A. Notices and hearings. The processing of a Flood Standard Exception shall occur in compliance with the provisions of Section 9.72.080 for Minor Use Permits.

B. Factors to be considered. In reviewing and deciding upon applications for Flood Standard Exceptions, the Floodplain Administrator shall consider all technical evaluations, all relevant factors, standards specified in other sections of this Chapter, and the:

1. Danger that materials may be swept onto other lands to the injury of others;
2. Dangers to life and property because of flooding or erosion damage;

3. Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
4. Importance of the services provided by the proposed facility to the community;
5. Necessity to the facility of a waterfront location, where applicable;
6. Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
7. Compatibility of the proposed use with existing and anticipated development;
8. Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. Safety of access to the property in time of flood for ordinary and emergency vehicles;
10. Expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,
11. 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 system, and streets and bridges.

C. Exception criteria. Generally, a Flood Standard Exception may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, provided that the issues listed in Subsections B.1 through B.11 have been fully considered. As lot size increases beyond one-half acre, the technical justification required for issuing the Exception increases.

1. An Exception may be issued for the repair, rehabilitation, or restoration of a historic structure upon a determination that the proposed repair, rehabilitation, or restoration will not preclude the structure's continued designation as an historic structure and the exception is the minimum necessary to preserve the historic character and design of the structure.
2. An Exception shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
3. An Exception shall only be issued upon a determination that the exception is the minimum necessary, considering the flood hazard, to afford relief.
4. An Exception shall only be issued upon:
 - a) A showing of good and sufficient cause;
 - b) A determination that failure to grant the exception would result in exceptional hardship to the applicant; and
 - c) A determination that the granting of a exception will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

5. An Exception may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the above provisions of this Subsection C. are satisfied, and that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

D. Conditions of approval. Upon consideration of the factors in Subsection C., and the purposes of this Chapter, the Flood Plain Administrator may attach conditions to the granting of exceptions as it deems necessary to further the purposes of this Chapter.

E. Notice to applicant. An applicant to whom a Flood Standard Exception is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. A copy of the notice shall be recorded by the Flood Plain Administrator in the office of the Humboldt County Recorder.

F. Records. The Flood Plain Administrator shall maintain the records of all appeal actions, including justification for their issuance, and report any exceptions to the Federal Insurance Administration upon request.

SEC. 8407. Appeal

Any permit applicant, or permit holder affected by any decision of the Floodplain Administrator, may file with the City Manager a written request for reconsideration within 10 days of such decision, action, or determination, setting forth in detail the facts supporting the applicant's request for reconsideration. The City Manager shall make a final ruling on the appeal within 15 days of the close of the meeting.

If the ruling made by the City Manager is unsatisfactory to the person requesting reconsideration, he/she may within 10 days after notification of the City Manager's action, file a written appeal to the City Council. The written appeal shall be heard by the Council within 60 days from the date of filing. The City Manager's decision, action, or determination shall remain in effect during such period of reconsideration.

Section 3: Severability. If any section, subsection, sentence, clause or phrase of this chapter is for any reason held to be invalid or unconstitutional, the decision shall not affect the validity of the remaining portions of the Chapter. The City Council hereby declares that it would have passed this Chapter, and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid under law.

Section 4: This ordinance is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that adoption of the ordinance may have a significant effect on the environment.

Section 5: The City Council finds that:

1. The Federal Emergency Management Agency (FEMA) has established the National Flood Insurance Program (NFIP) pursuant to the National Flood Insurance Act of 1968. The general purpose of the NFIP is both to offer primary flood insurance to properties with significant

flood risk, and to reduce flood risk through the application of local floodplain management standards.

2. Generally, local governments voluntarily participate in the NFIP to allow local property owners to have access to flood insurance. Participation requires the local government to adopt minimum floodplain standards. Participating communities that fail to maintain minimum floodplain standards can be put on probation or suspended from the NFIP, with the result that individuals cannot purchase NFIP flood insurance.
3. FEMA has revised its local flood insurance rate maps (FIRMs) establishing new minimum floodplain standards for NFIP participation effective November 4, 2016.
4. The City of Arcata's current floodplain standards will not meet the revised minimum standards required unless updated. In order for property owners to remain eligible for NFIP participation, the City must update its flood plain management standards through adoption of this Ordinance no later than November 4, 2016.

Based on the findings set forth herein, for the immediate preservation of the public peace, health or safety, this Ordinance shall go into effect and be in full force and operation upon its final passage and adoption, pursuant to Government Code Section 36937.

DATE: November 2, 2016

ATTEST:

APPROVED:

/s/ Kara Newman
Deputy City Clerk, City of Arcata

/s/ Paul J. Pitino
Mayor, City of Arcata

CLERK'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Ordinance No. 1479 passed and adopted at a regular meeting of the City Council of the City of Arcata, County of Humboldt, State of California on the 2nd day of November, 2016, by the following vote:

AYES: PITINO, ORNELAS, PEREIRA, WINKLER

NOES: NONE

ABSENT: WHEETLEY

ABSTENTIONS: NONE

/s/ Kara Newman
Deputy City Clerk, City of Arcata