## Bill No. 2009-5 ORDINANCE 166

#### FLOODPLAIN MANAGEMENT ORDINANCE

Sponsored by: <u>Councilman Acklin</u>

**Summary:** The City of Caliente has proposed a Flood Plain Management Ordinance, which sets forth the following: the statutory authorization, findings of facts, purpose and methods concerning the ordinance; definitions; general provisions; administration; provisions for flood hazard reduction; variance procedures; and procedures related to map revision and amendment.

## THE CITY COUNCIL OF THE CITY OF CALIENT DOES ORDAIN AS FOLLOWS:

#### SECTION 1.0 STATUTORY AUTHORIZATION, FINDINGS OF FACTS, PURPOSE AND METHODS

## 1.1\_ STATUTORY AUTHORIZATION

NRS 278.020, 244A.057, and 543.020 confer upon local government units authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Caliente, Lincoln County, Nevada does hereby adopt the following floodplain management regulations.

#### 1.2 FINDING OF FACT

- A. The flood hazard areas of the City of Caliente are subject to periodic inundation which results in danger of loss of life and property, health and safety hazards, disruption of commerce and government services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- B. The cumulative effects of obstructions in areas of special flood hazards, which increase flood heights and velocities, are major contributors to flood losses. The flood losses are also caused by structures that are inadequately elevated, flood proofed, or protected from flood damage.
- C. The ability of the City of Caliente to overcome impediments to wash maintenance have, in the past, resulted in significant damage to personal property, local structures and public infrastructure.

#### 1.3 STATEMENT OF PURPOSE

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

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. Minimize damage to public facilities and utilities such as water mains, electric, telephone, and sewer lines, and streets and bridges located in areas of special flood hazards;
- F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blighted areas caused by flood damage;
- G. Ensure potential buyers are notified of property located in areas of special flood hazards;
- H. Ensure those who occupy the areas of special flood hazards assume responsibility for their actions; and
- I. Maintain qualifying standards for participation in the National Flood Insurance Program.

## 1.4 METHODS OF REDUCING FLOOD LOSSES

To accomplish its purposes, this ordinance includes methods and provisions to:

- A. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities.
- B. Require that land uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of the initial construction;
- C. Control the alteration of natural floodplains, alluvial fans, stream channels, and natural protective barriers which help accommodate or channel flood waters;
- D. Control filling, grading, dredging, and other development which may increase flood damage; and

E. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

# SECTION 2.0 DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application. A local ordinance need only include definitions of words actually used in the ordinance.

Accessory Use	A use which is incidental and subordinate to the principal use of the parcel of land on which it is located.		
Act	The National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973, both as amended.		
Actual Cash Value (ACV)	The replacement cost of an insured item of property at the time of loss, less the value of physical depreciation as to the item damaged.		
Alluvial Fan	A geomorphologic feature characterized by a cone or fan-shaped deposit of clay, silt, sand, gravel, and boulders that have been eroded from mountain slopes, transported by flood flows, and deposited on areas leading to and including the valley floor.		
Alluvial Fan Flooding	Flooding occurring on the surface of an alluvial fan or similar land form which originates at the apex and is characterized by high-velocity flows, active processes of erosion, sediment transport, deposition, and unpredictable flow paths.		
Anchor	A series of methods used to secure a structure to its footings or foundation wall so that it will not be displaced by flood or wind forces.		
Apex	The highest point on an alluvial fan or similar land form below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.		
Appeal	A request for a review of the City Floodplain Administrator=s interpretation of any provisions of this ordinance.		
Appurtenant Structu	A detailed garage or carport servicing a multiple family dwelling.		
Area of Shallow Flooding	Designated Zones AO and AH on the City=s Flood Insurance Rate Map (FIRM) with a 1% or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow my be		

	evident. Such flooding is characterized by ponding or sheet flow.
Assignment	The transfer by a policyholder of his/her legal right or interest in a policy contract to a third party. In the National Flood Insurance Program (NFIP), written assignment of a local policy is permissible upon transfer of title without the consent of the Administrator except in the case where a residential (household) contents-only policy is involved or a policy was issued to cover a 1-4 family residential building in the course of construction.
Backwater Effect	The rise in water surface elevation caused by some obstruction such as a narrow bridge opening, debris, buildings or fill material that limits the area through which water must flow.
Backfill	The placement of fill material within a specified depression as a means of improving flood water conveyance or to restore the land to the natural contours existing prior to excavation.
Base Flood	A flood which has a 1% chance of being equaled or exceeded in any given year (also called a A100-year flood).
Base Flood Depth (BFD)	The depth shown on the FIRM for Zone AO that indicates the depth of water above highest adjacent grade resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.
Base Flood Elevation	The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplain of riverine areas.
Base Floodplain	The floodplain that would be inundated by a 1% chance flood.
Basement	Any area of a building having its floor subgrade on all sides.
Binder	A temporary agreement between company, producer, and the insured that the policy is in effect.
Blanket Insurance	A single amount of insurance applying to more than one building and/or contents. Blanket insurance is not permitted under the NFIP.
Building	See structure.
Channel	A natural or artificial watercourse with definite bed and banks to confine

	and conduct flowing water.
Chanel Capacity	The maximum flow that can pass through a channel without overflowing the banks.
Claims Coordinating Office (CCO)	A clearinghouse for the various insurers who are responding to a multi-peril catastrophe. Through voluntary participation, all losses are reported to the Coordinating Office and are processed to locate address matches among the reported claims. The interest of each carrier is protected as the Claims Coordinator maintains sole control over the policy and loss information. If a match is found, special care is taken to direct the assigned adjusters to a mutually agreeable adjustment or to have one adjuster surrender his/her loss with the assurance that every effort will be made to replace it.
Code of Federal Regulations	Codification of the general and permanent rules published in the Federal Regulations Register (CFR) by the Executive Departments and agencies of the Federal Government.
Coinsurance	This provision reduces the loss payment if the insured does not carry coverage equal to at least 80% of the replacement cost of the damaged building.
Community/ City	Any political subdivision thereof which has authority to adopt and enforce flood plain management regulations for the areas within its jurisdiction.
Community Number	A 6-digit designation identifying each NFIP community. The first two numbers are the state code. The next four are the Federal Insurance Administrator (FIA)-assigned community number. An alphabetical suffix is added to a community number to identify revisions in the FIRM for that community.
Community Rating System (CRS)	A program developed by FIA to provide incentives for those communities in the Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding. The CRS for Caliente, Nevada is 320015.
Conditional Letter of Map Amendment (CLOMA)	A letter from Federal Emergency Management Agency (FEMA) stating that a proposed structure that is not to be elevated by fill would not be inundated by the base flood if built as proposed.
Conditional Letter of Map Revision (CLOMR)	Procedures by which contractors, developers and communities can request review and determination by the Federal Insurance Administrator of scientific and technical data for a proposed project, when complete and

	functioning effectively would modify the elevation of individual structures and parcels of land, stream channels, and floodplains on the FIRM.
Conditional Letter of Map Revision (Based on Fill) (CLOMR-F)	A letter from FEMA stating that a parcel of land or proposed structure that is to be elevated by fill would not be inundated by the base flood if fill is placed on the parcel as proposed or the structure is built as proposed.
Condominium	A system of individual ownership of units in a multi-unit building or buildings or in single-unit buildings in which each unit owner has an undivided interest in the common areas of the building(s) and facilities that serve the building(s).
Control Office	An NFIP claims office similar to a Flood Insurance Claims Office (FICO) with the exception that the control office does not (1) maintain insured files, (2) maintain a claims examiner staff at the site, and (3) issue claim payments.
City-wide Map	A FIRM that shows flooding information for the entire geographic area of the incorporated area of the City.
<b>Critical Features</b>	An integral and readily identifiable part of a flood protection system (e.g. dams, floodwalls, channel improvements), without which the flood protection provided by the entire system would be compromised.
Critical Structure(s)	A structure for which even a slight chance of flooding would reduce or eliminate its designed function of supporting a community in an emergency. Fire stations, hospitals, municipal airports, police stations, communication antennas or towers, elder care facilities (retirement homes), fuel storage facilities, schools designated as emergency shelters, fresh water and sewage treatment facilities are examples.
Curvilinear Line	The border on either an FHBM or FIRM the delineates the special flood, mudslide (i.e., mudflow) and/or flood related erosion hazard areas and consists of a curved or contour line that follows the topography.
Date of Construction	The date that the building permit was issued provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date.
Deductible Buyback	For an additional premium, policyholders who wish to reduce their deductibles from a standard deductibles of \$1,000 for Pre-FIRM risks may

	opt to purchase separate \$500 deductibles for building and content coverage.
Designated Floodway	The channel of a stream and the portion of the adjoining floodplain designated by a regulatory agency to be kept free of further development to provide for unobstructed passage of flood flows.
Development	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.
Diagram Number	The diagram numbers on the FEMA Elevation Certificate identify the various types of buildings.
Direct Physical Loss By or From Flood	Any loss in the nature of actual loss of or physical damage to, evidenced by physical changes, the insured property (building or personal property) which is directly and proximately caused by a Aflood@ (as defined in the policy forms).
Doublewide Manufactured (Mobile) Home	A manufactured (mobile) home that, when assembled as a nonmovable, permanent building, is at least 16 feet wide with an area within its perimeter walls of at least 600 square feet. A doublewide is not classified as a manufactured (mobile) home for insurance rating purposes under the NFIP, but is to be classified under one of the other building types.
Dry Proofing	A floodproofing method used to design and construct buildings so as to prevent the entrance of floodwaters.
Elevated Building	A non-basement building that has its lowest elevated floor raised above the ground level by foundation walls, shear walls, posts, piers, pilings, or columns.
Elevation Certificate	The Elevation Certificate is required in order to properly rate post-FIRM buildings, which are buildings constructed after publication of the FIRM, for flood insurance Zones A1-A30, AE, AH, A (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/O. The Elevation Certificate is not required for pre-Firm buildings unless the building is being rated under the optional post-FIRM Flood insurance rules.
Emergency Program	Typically the first phase under which a community participates in the NFIP. It is intended to provide a first layer amount of insurance at subsidized rates to all insurable structures in that community before the

	effective date of the initial FIRM.
Enclosure	That portion of an elevated building below the lowest elevated floor that is either partially or fully shut-in by rigid walls.
Encroachment	The advance or infringement of uses, plant growth, excavation, fill, buildings, permanent structures or development, storage of equipment and materials, or any other physical object placed in the floodplain that hinders the passage of water or otherwise affects flood flows.
Erosion	The process of the gradual wearing away of any landmass. This peril is not per se covered under the program. (See flood-related erosion).
Existing Manufactured Home (Mobile Home) Park or Subdivision	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 the installation of utilities, construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the City.
Expansion to a Manufactured Home (Mobile Home) Park	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, construction of streets, and either final site grading or the pouring of concrete pads).
Federal Emergency Management Agency (FEMA)	The federal agency under which the National Flood Insurance Program (NFIP) is administered.
Federal Insurance Administration (FIA)	The government unit, a part of FEMA, that administers the National Flood Insurance Program (NFIP).
Federal Register	A document published daily by the Federal Government that provides a uniform system for making available to the public regulations and legal notices issued by Federal Agencies.
Flash Flood	A flood that crests in a short period of time and is often characterized by high velocity flows. It is often the result of heavy rainfall in a localized area.
Flood, Flooding Or Floodwaters	A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of floodwaters; the unusual and

	rapid accumulation or runoff of surface waters from any source and the condition resulting from flood-related erosion.
Flood Control	Keeping flood waters away from specific developments or populated areas by the construction of flood storage reservoirs, channel alterations, dikes and levees, bypass channels, or other engineering works.
Flood Frequency	A statistical expression of the average time period between floods equaling or exceeding a given magnitude.
Flood Hazard An of Boundary Map (FHBM)	ficial map of a community, issued by the Administrator, where the boundaries of the flood related erosion areas having special hazards that have been designated as Zones A, M, and/or E.
Flood Insurance Rate Map (FIRM)	Official map on which the FEMA or FIA has delineated both the areas of special flood hazards and the risk premium zones applicable to the City.
Flood Insurance Study (FIS)	The official report provided by the FIA that includes flood profiles, the FIRM, and the water surface elevation of the base flood.
Floodplain and Flood-Prone Area	Any land area susceptible to being inundated by waters from any source. (See flooding).
Floodplain Administrator	The individual appointed by the City Council who is given specific authority and responsibilities to enforce the City's Floodplain Management Regulations, under the direction of the City Council. The person named as Floodplain Administrator must be capable of interpreting the ordinance and have access to necessary technical competence.
Floodplain Management	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 and floodplain management plans, regulations and ordinances.
Floodplain Management Regulations	This ordinance, and any federal, state or local regulations plus community zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a grading and erosion control) and other applications of police power which control development in flood-prone areas to prevent and reduce flood loss and damage.
Floodproofing	Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real

	estate or improved property, water and sanitary facilities, structures and their contents. (Refer to FEMA Technical Bulletins TB1-93, TB8-93 and TB7-93 for Guidelines on dry and wet floodproofing).	
Flood-related Erosion	The collapse or subsidence of land along a stream or wash or other body of water as a result of undermining caused by currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, possibly accompanied by a severe storm or by an unanticipated force of nature such as a flash flood, or by some similarly unusual and unforeseeable event which results in flooding.	
Flood-related Erosion Prone Area	A land area adjoining a body of water which, due to the composition of the shoreline or bank and high water levels or wind-driven currents, is likely .to suffer flood-related erosion damage.	
Flood-related Erosion Area Management	The operation of an overall program of corrective and preventive measures for reducing flood-related erosion damage, including but not limited to emergency preparedness plans, flood-related erosion control works, and floodplain management regulations.	
Floodway	The channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation. Also referred to as a ARegulatory Floodway@.	
Floodway Encroachment Lines	The lines marking the limits of floodways on Federal, State and local floodplain maps.	
Floodway Fringe	The area of the floodplain on either side of the Regulatory Floodway where encroachment may be permitted.	
Flood Insurance Risk Zone Designations	The zone designations indicate the magnitude of the flood hazard in specific areas of the City	
Zone A	Special Flood Hazard Areas (SFHA) inundated by the 100-year flood; base flood; base flood elevations are not determined.	
Zone A1-30 and Zone AE	SFHA inundated by the 100-year flood; base flood elevations are	
Zone AO	SFHA inundated by the 100-year flood; with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths are determined. For areas of alluvial fan flooding, velocities are also	

		determined.
Zone AR		SFHA inundated by the 100-year flood; flood depths of 1 to 3 feet
		(usually areas of ponding); base flood elevations are determined.
Zones AR / A		SFHA that result from the decertification of a previously accredited
AR/AE, AR/		flood protection system that is in the process of being restored to
AR/AO, and	AR/A	provide a 100-year or greater level of flood protection. After
		restoration is complete, these areas will still experience residual
		flooding from other flooding sources.
Zone A99		SFHA inundated by the 100-year flood to be protected from the
		100-year flood; no base flood elevations are determined.
Zones B and		Areas of 500-year flood; areas subject to the 100-year flood with
Zone X (sha	ded)	average depths of < than 1 foot or with contributing drainage area
		<1 square mile; and areas protected by levees from the base flood.
Zone C and	h a d a d)	Areas determined to be outside the 500-year floodplain.
Zone X (uns)	naded)	Among in subject floor of home and a supple
Zone D		Areas in which flood hazards are undetermined.
Footing Foundation	spread capaci The ur	nderlying structure of a building usually constructed of concrete that
Foundation Walls	A sup	rts the foundation walls, piers, or columns. port structure that connects the foundation to the main portion of the ng or superstructure.
Fraud/ Victimization	damag cases of follow the Cit ordina entitie and by Moreo who m that su no add may be and the require	ity of Caliente <i>shall not</i> be civilly responsible for injuries, loss or ges arising from or related to variances to this ordinance, except in of clear fraud on or victimization to the public at large. By ring the enactment procedures required by the Caliente City Charter, ty has put the world on notice of the requirements contained in this nce and the City cannot be responsible or liable to organizations, s, or individuals who knowingly seek a variance to this ordinance, v so doing, incur injury, loss or damage to person or property. over, the City accepts no liability to future owners of the property hay be subject to all the costs, inconvenience, danger, and suffering uch damages may bring. This is, in part, because the City possesses litional, affirmative duty to notify future owners, or co-owners, who e unaware of the risk potential to the property due to flood damage e extremely high rates for flood insurance, beyond the notice ements set forth in the ordinance enactment procedures of the te City Charter.

Freeboard	A margin of safety usually expressed in feet above a flood level for purposes of flood plain management. Freeboard tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for selected size flood and floodway conditions, such as bridge openings, additional debris in the wash, and the hydrological effect of urbanization of the watershed.		
Functionally Dependent Use	A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, as in marina facilities. The term does not include long-term storage or related manufacturing facilities.		
Governing Body	The City Council of the City of Caliente which is empowered to adopt and implement regulations to provide for public health, safety and general welfare of the citizens.		
Hardship	Related to Variances of this ordinance. The <u>exceptional</u> hardship would result from failure to grant the requested variance. The City Council requires the variance be exceptional, unusual, and <u>pertain only to the</u> <u>property involved</u> . Mere economic or financial hardship alone is <u>not</u> 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 a variance, 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	The highest natural elevation of ground surface prior to construction next to the proposed walls of a structure.		
Historic Structure	Any structure that is:		
	A.	Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;	
	В.	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; 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.
Hydraulics Hydrodynamic Loads	The science that deals with practical applications of water in motion. Forces imposed on structures by floodwaters due to the impact of moving water on the upstream side of the structure, drag along its sides, and eddies or negative pressures on its downstream side.
Hydrograph	A graph that charts water movement as a function of time. It shows flood stages, depicted in feet above mean sea level or gage height, plotted against stated time intervals.
Hydrology	The science of the behavior of water in the atmosphere, on the earth=s surface and underground.
Hydrostatic Loads	Forces imposed on a flooded structure due to the weight of the water.
Letter of Map Amendment (LOMA)	The procedure by which any owner or lessee of property who believes his property has been inadvertently included in a Special Flood Hazard Area can submit scientific and technical information to the FIA for review to remove the property from said area. The Administrator will not consider a LOMA if the information submitted is based on alteration of topography or new hydrologic or hydraulic conditions since the effective date of the FIRM.
Letters of Map Revision (LOMR)	An official revision to a current effective FIRM. A LOMR officially changes flood zone, floodplain and floodway designations, flood elevations and planimetric features.

**NOTE:** All requests for LOMR's are made to FEMA through the City Council and Mayor since the City of Caliente must adopt any changes and revisions to the map.

Letters of Map Revision (Based on Fill)(LOMR-F)	A letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.
Lowest Floor	The lowest floor of the lowest enclosed area, including basements. 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 the enclosure does not violate applicable non-elevation design requirements.

Lowest Floor Elevation (LFE)	The measured distance of a building=s lowest floor above the National Geodetic Vertical Datum (NGVD) or other datum specified on the FIRM for that location.
Manufactured/ Mobile Home perma	A structure, transportable in one or more sections, which is built on a nent chassis and is designed for use with our without a permanent foundation when attached to the required utilities. The term <i>Amanufactured home</i> @ does not include <i>Arecreational vehicles</i> @.
Manufactured Home Park or Subdivision	A parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.
Market ValueFor th	e purposes of determining substantial improvement, market value pertains only to the structure in question. It does not pertain to the land, landscaping or detached accessory structures on the property. For determining improvement, the value of the land must always be subtracted.

#### Acceptable estimates of market value can be obtained from the following sources:

- A. Independent appraisals by a professional appraiser.
- B. Detailed estimates of the structure's Actual Cash Value (used as a substitute for market value based on the preference of the community).
- C. Property appraisals used for tax assessment purposes (Adjusted Assessed Value: used as a screening tool).
- D. The value of buildings taken from NFIP claims data (used as a screening tool).
- E. AQualified estimates@ based on sound professional judgment made by staff of the local building department or local or State tax assessor's office.

As indicated above, some market value estimates should only be used as screening tools to identify those structures where the substantial improvement ratios are obviously less than or greater than 50% (e.g., less than 40% or greater then 60%). For structures that fall between the 40% and 60% range, more precise market value estimates should be used.

Mean Sea LevelFor purposes of the National Flood Insurance Program, the National<br/>Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base<br/>flood elevations shown on the City's FIRM are referenced.

#### Modular Building A building that is usually transported to its site on a steel frame or special

	trailer because it does not have a permanent chassis like a manufactured (mobile) home. A modular building is classified and rated under one of the other building types.
Natural Grade	The grade unaffected by construction techniques such as fill, landscaping, or berming. Buildings for which the AStart of Construction@ commenced on or after the effective date of an initial City's FIRM (June 1, 1982) including any subsequent improvements.
New Construction	
New Manufactured Home (Mobile Home) Subdivision	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, construction of streets, and either final site grading or the pouring of concrete pads is completed on or after the effective date of the floodplain management ordinance adopted by the City Council.
Non-Residential	Includes, but is not limited to: small business concerns, churches, schools, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, and hotels or motels with normal room rentals for less than 6 months duration.
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	Having the same meaning as base flood.
Other Residential	Hotels or motels where the normal occupancy of a guest is 6 months or more; a tourist home or rooming house which has more than 4 roomers. A residential building (excluding motels with normal room rentals for less than 6 months duration and containing more than 4 dwelling units) is permitted incidental office, professional private school, or studio occupancy, provided that the total area of such occupancy is limited to less than 25% of the total floor area within the building.
Physical Map Revisions (PMR)	A reprinted NFIP map incorporating changes to floodplains, floodways, or flood elevations. Because of the time and cost involved to change, reprint,

	and redistribute an NFIP map, a PMR is usually processed when a revision reflects large scope changes.
Post-FIRM Construction Pre-FIRM Construction	Construction or substantial improvement that started on or after June 1, 1982, the effective date of the initial FIRM of the City of Caliente. Construction or substantial improvement that started on or before June 1, 1982, the effective date of the initial FIRM of the City of Caliente.
Principal Residence	A single family dwelling in which at the time of loss, the named insured or the named insured=s spouse has lived for either (1) 80% of the calendar year, or (2) 80% of the period of ownership, if less than 1 year.
Principal Structure	A structure used for the principal use of the property as distinguished from an accessory use.
Proper Openings Enclosures (Applicable to Zones A, A1-A30, AE, AO, AH, AR, and AR Dual Zones)	All enclosures below the <b>lowest floor</b> must be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings, with positioning on at least two walls, having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding must be provided. The bottom of all openings must be no higher than 1 foot above grade.
Public Safety/ Nuisance	Related to Variances of the ordinance. The granting of a variance must not result in anything which is injurious to safety or health of the entire community or neighborhood.
Recreational Vehicle	A vehicle built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light-duty track, and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
Replacement Cost	The cost to replace property with the same kind of material and construction without deduction for depreciation.
Residential Condo- minium Building	A building owned by the members of a condominium association containing one or more residential units and in which at least 75 percent of the floor area within the building is residential.
Sheet Flow Area	Having the same meaning as Area of Shallow Flooding.
Special Flood	Darkly shaded area on a FHBM or a FIRM that identifies an area that has a

Hazard Area (SFHA)	1% chance of being flooded in any given year (100-year floodplain). Over a 30-year period, the life of most mortgages, there is at least a 26% chance that this area will be flooded. The FIRM identifies these shaded areas as FIRM Zones A, AO, AH, A1-A30, AE, 199, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO.
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 from the date of the permit. 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 placement of a manufactured home on a foundation, or any work beyond the stage of excavation. 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 that is principally above ground. This definition includes gas or liquid storage tanks and manufactured homes.
Substantial Damage	Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damage condition would equal or exceed 50% of the market value of the structure before the damage occurred.
Substantial Improvement	<ul> <li>Any reconstruction, rehabilitation, addition, or other proposed new development of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the Astart of construction@ of the improvement. This term includes structures which have incurred Asubstantial damage,@ regardless of the actual repair work performed. The term does not, however, include either:</li> <li>(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 a safe living conditions, or</li> <li>(2) Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic</li> </ul>

structure. Variance 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 The failure of a structure or other development to be fully compliant with this ordinance. A structure or other development in a special flood hazard area, without an elevation certificate, other certifications or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided. Water Surface The height, in relation to the NGVD of 1929 or other datum of floods of Elevation various magnitudes and frequencies in the floodplains of coastal or riverine areas. Watercourse A 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. Zone A geographical area shown on a FHBM or a FIRM that reflects the severity or type of flooding in the area.

## SECTION 3 GENERAL PROVISIONS

## 3.1 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazards within the jurisdiction of the City of Caliente, Nevada.

## 3.2 BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study (FIS) and accompanying Flood Insurance Rate Maps (FIRM) (most recent adjustment always being applicable (current most recent dated October 15, 1985)) and Flood Boundary and Floodway Maps (FBFM), and all subsequent amendments and or revisions, are hereby adopted by reference and declared to be a part of this ordinance. The FIS and attendant mapping is the <u>minimum area</u> of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this ordinance and which are recommended to the City Council by the City Floodplain Administrator. A copy of the FIRM is on file at the office of the Director of Community Development, City of Caliente.

## 3.3 COMPLIANCE

**No** structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations (including violations of conditions and safeguards established in connection with conditions) shall constitute a Misdemeanor. Moreover, violations shall also result in a Civil Fine not to exceed \$500.00, per offense. Each day the violation continues is a separate violation and subject to the same fine for each violation. Nothing herein shall prevent the City Council from taking such lawful action as is necessary to prevent or remedy any violation.

# 3.4 ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and other ordinances, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restriction(s) or that impose the higher standard(s) shall prevail.

## 3.5 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 City Council, and
- (3) deemed neither to limit nor repeal any other powers granted under State of Nevada statutes.

# 3.6 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 on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance 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 ordinance shall not create liability on the part of the City Council, any officer or employee of the City, the State of Nevada, or the Federal Insurance Administration, Federal Emergency Management Agency, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

**Commentary:** the 100-year flood was selected for floodplain management purposes because it more or less matches the life expectancy of many types of floodplain uses. A lower standard (like a 25-year flood) would allow more flood damages, while a high standard (like a 500-year flood) would increase development costs and remove acres of land from potential development. However, with any standard, a larger flood will eventually occur. This section is designed to eliminate community liability when one of those extreme floods occurs.

# 3.7 DECLARATION OF PUBLIC NUISANCE

Every new structure, building, fill, excavation or development located or maintained within any area of special flood hazard after October 15, 1985 in violation of this ordinance is a public nuisance per se and may be abated, prevented or restrained by action of the City Council.

# 3.8 ABATEMENT OF VIOLATIONS

Within 30 days of discovery of a violation of this ordinance, the City Floodplain Administrator shall submit a report to the City Council which shall include all information available to the City Floodplain Administrator which is pertinent to said violation. Within 30 days of this report, the City Council shall either:

- A. Take any necessary action to effect the abatement of such violation, or
- B. Issue a variance to this ordinance in accordance with the provisions of Section 6.0; or
- C. Order the owner of the property upon which the violation exists to provide whatever additional information may be required for their determination. Such information must be provided to the City Council within 30 days of such order, and the City Floodplain Administrator shall submit an amended report including the additional information to the City Council within a subsequent 30 days. At their next regularly scheduled public meeting, the City Council shall either order the abatement of said violation or they shall

grant a variance in accordance with the provisions of Section 6.0 herein.

D. If a variance is not issued, and the owner does not abate the violation within the time limit set by the City Council, the City Council shall submit to the Administrator of the Federal Insurance Administration a declaration for denial of insurance, stating that the property is in violation of a cited statute or local law, regulation or ordinance, pursuant to section 1316 of the National Flood Insurance Act of 1968, as amended.

## 3.9 UNLAWFUL ACTS

- A. It is unlawful for any person to divert, retard or obstruct the flow of waters in any watercourse when it creates a hazard to life or property without securing the written authorization to do so from the City Council. Where the watercourse is a delineated floodplain, it is unlawful to excavate or build any structure affecting the flow of waters without securing written authorization from the City Council. Application for such actions may be made through the City Floodplain Administrator.
- B. Any person violating the provisions of this section shall be guilty of a misdemeanor.

## 3.10 SEVERABILITY

This ordinance and the various parts thereof are hereby declared to be severable. Should any section of this ordinance be declared by the courts to be unconstitutional or invalid, such decisions shall not affect the validity of the ordinance as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

## SECTION 4 ADMINISTRATION

#### 4.1 DESIGNATION OF THE CITY FLOODPLAIN ADMINISTRATOR

The City Council establishes the position of City of Caliente Floodplain Administrator to administer and implement this ordinance by granting or denying floodplain development permits in accordance with its provisions. This position shall be filled by appointment, pursuant to Section 1.080 of the Caliente City Charter, and shall perform such duties under the direction of the City Council.

#### 4.2 ESTABLISHMENT OF DEVELOPMENT PERMIT

A floodplain development permit is hereby established for all construction and other development to be undertaken in areas of special flood hazard in the City of Caliente for the purpose of protecting its citizens from increased flood hazards and ensuring new development is constructed in a manner that minimizes its exposure to flooding. It shall be unlawful to undertake any development in an area of special flood hazard, as shown on the FIRM enumerated in Section 3.2 without a valid floodplain development permit. Applications for a permit shall be made on forms furnished by the City Floodplain Administrator and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevation of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.

#### 4.3 PERMIT APPLICATION

The applicant shall provide at least the following information, where applicable. Additional information may be required on the permit application forms.

- A. The proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all residential and non-residential structures whether new or substantially improved to be located in Zones A, A1-A30, AE, and AH, if base flood elevations data are available.
- B. In Zone AO the proposed elevation in relation to mean sea level, of the lowest floor (including basement) and the elevation of the highest adjacent grade of all residential and nonresidential structures whether new or substantially improved.
- C. The proposed elevation in relation to mean sea level, to which any new or substantially improved non-residential structure will be floodproofed.
- D. A certificate from a licensed professional engineer or architect in the State of Nevada that any utility floodproofing meets a criteria in Section 5.2, UTILITIES.

- E. A certificate from a licensed professional engineer or architect in the State of Nevada that any non-residential floodproofed structures meet the criteria in Section 5.1.5. NONRESIDENTIAL FLOODPROOFING REQUIREMENTS.
- F. When a watercourse will be altered or relocated as a result of the proposed development, the applicant must submit the maps, computations, and other materials required by the FEMA to process a Letter of Map Revision (LOMR) and pay any fees or other costs assessed by FEMA for processing the revision.

**Commentary:** Filing a LOMR will require computations prepared by a professional engineer licensed in the State of Nevada that demonstrate the altered or relocated watercourse segment will provide equal or greater conveyance and that the conveyance capacity of the altered or relocated stream will be maintained. See FEMA Form MT-2 (91-89 Series) for the detailed requirements for preparing a LOMR.

- G. A technical analysis, by a professional engineer licensed in the State of Nevada, showing the proposed development located in the special flood hazard area will not cause physical damage to any other property.
- H. When there is no base flood elevation data available for Zone A from any source, the base flood elevation data will be provided by the permit applicant for all proposed development of subdivisions, manufactured home and recreational vehicle parks in the special flood hazard areas, for all developments of 10 lots or 3 acres, whichever is less.

## 4.4 DUTIES AND RESPONSIBILITIES OF THE CITY FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the City Floodplain Administrator shall include, but not be limited to, the following:

## 4.4.1 PERMIT APPLICATION REVIEW

The floodplain development permit will not be issued by the City Floodplain Administrator until the following has been accomplished:

- A. Review all applications for completeness, particularly with the requirements of subsection 4.3, APPLICATION FOR A PERMIT, and for compliance with the provisions and standards of this ordinance.
- B. Review all subdivision and other proposed new development, including manufactured home and recreational vehicle parks to determine whether the proposed development site will be reasonably safe from flooding. When the proposed building site is located in the

Special Flood Hazard Area, all new construction and substantial improvements will meet the applicable standards of Section 5.1, STANDARDS OF CONSTRUCTION.

- C. Determine whether any proposed development in the Special Flood Hazard Area may result in physical damage to any other property to include stream bank erosion and any increase in velocities or that it does not adversely affect the carrying capacity of the areas where base flood elevations have been determined but a floodway has not been designated. For purposes of the ordinance, "adversely affects" means the cumulative effect of the proposed development when combined with all other existing and anticipated development which will increase the water surface elevation of the base flood more than one foot at any point. To assist the City Floodplain Administrator in making this determination, the permit applicant may be required to submit additional technical analyses.
- D. Ensure all other required State and Federal permits have been received.
- E. That the City Planning Commission and the City Council have reviewed the application and approved said development.

#### 4.4.2 USE OF OTHER FLOOD DATA

- A. When the FEMA has designated Special Flood Hazard Areas on the City's FIRM but has neither produced water surface elevation data nor identified a floodway, the City Floodplain Administrator shall attempt to obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, including data developed pursuant to paragraph 4.4.6.H, as criteria for requiring new construction, substantial improvements or other proposed development meet the requirements of this ordinance.
- B. When base flood elevations are not available, the City Floodplain Administrator may use flood information from any other authoritative source, such as historical data, to establish flood elevations within the Special Flood Hazard Areas. This information shall be submitted to the City Council for adoption.

#### 4.4.3 ALTERATION OF WATERCOURSES

Prior to issuing a permit for any alteration or relocation of watercourse the City Floodplain Administrator must:

- A. Have processed the Letter of Map Revision (LOMR).
- B. Notify all adjacent communities, Nevada's National Flood Insurance Program Coordinator, and submittal of evidence of such notification to the FIA, and the FEMA.

C. Determine that the potential permit recipient has provided for maintenance within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

## 4.4.4 INSPECTIONS

The City Floodplain Administrator or designee shall make periodic inspections throughout the period of construction to monitor compliance with the requirements of the floodplain development permit or any variance provisions.

Inspections related to floodplain development may be included in regular building inspections.

## 4.4.5 STOP WORK ORDERS

The City Floodplain Administrator shall issue, or cause to be issued, a stop work order for any floodplain development found non-compliant with the provisions of this ordinance or conditions of the development permit and all development found ongoing without a floodplain development permit. Disregard of a stop work order shall subject the violator to the penalties described in Section 3.3 of this ordinance.

## 4.4.6 RETAINING FLOODPLAIN DEVELOPMENT DOCUMENTATION

The City Floodplain Administrator shall obtain and retain for public inspection and have available for the National Flood Insurance Program coordinator or the FEMA representative conducting a Community Assistance Visit, the following:

- A. Floodplain development permits and certificates of compliance.
- B. Certification required by Sub-section 5.1.4 (lowest floor elevation).

**Commentary:** As part of the agreement for making flood insurance available in a community, the NFIP requires the community to adopt a floodplain management ordinance that specifies minimum requirements for reducing flood losses. One such requirement is that the community obtain the elevation of the lowest floor (including basement) of all new and substantially improved buildings, and maintain a record of such information. The Elevation Certificate provides a way for the City to comply with this requirement.

The Elevation Certificate is an important administrative tool of the National Flood Insurance Program. It is to be used to provide elevation information necessary to ensure compliance with community floodplain management ordinances, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment or Revision.

C. Certification required by Sub-section 5.1.5 (Flood-proofing Non-residential Structures).

- D. Certification of elevation required by Sub-section 5.3 (Subdivision Standards).
- E. Certification required by Sub-section 5.7 (Floodway Encroachments).
- F. Variances issued pursuant to Section 6.0 (Variance Procedures).
- G. Notices required under Sub-section 4.4.3 (Alteration of Watercourses).

## 4.4.7 MAP DETERMINATIONS

The City Floodplain Administrator may make map interpretations where needed, in writing with appropriate documentation as to the exact location of the boundaries of the areas of special flood hazard and where there appears to be a conflict between a mapped boundary and actual field conditions.

The City is authorized to assess a fee for map determinations.

## 4.4.8 APPEALS

The City Council of the City of Caliente shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the City Floodplain Administrator in the enforcement or administration of this ordinance.

# 4.4.9 SUBMISSION OF NEW TECHNICAL DATA TO FEMA

When the City of Caliente base flood elevations either 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, the City will submit the technical or scientific data to FEMA. Such submissions are necessary so that upon confirmation of the physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

#### SECTION 5 PROVISIONS FOR FLOOD HAZARD REDUCTION

#### 5.1 STANDARDS OF CONSTRUCTION

In all areas of special flood hazard areas the following standards are required.

#### 5.1.1 ANCHORING

- A. All new construction and substantial improvements of properties within a designated flood hazard zone shall be adequately 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 so located shall meet the anchoring standards of Section 5.5.

#### 5.1.2 CONSTRUCTION MATERIALS AND METHODS

All new construction and substantial improvements in flood hazard zones shall be constructed:

- A. With materials and utility equipment resistant to flood damage;
- B. Using methods and practices that minimize flood damage;
- C. Ensure electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities are designed or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- D. So that homes, within Zones AH or AO, have adequate drainage paths on slopes around structures to guide flood waters around and away from the proposed structures.

## 5.1.3 ELEVATION REQUIREMENTS FOR LOWEST FLOOR

Residential construction, new or substantial improvements in flood hazard zones, shall have the lowest floor, including basement as follows:

- A. In Zone AO, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated <u>at least three feet above</u> the highest adjacent grade if no depth number is specified.
- B. In Zone A, elevated to at least two feet above the base flood elevation.
- C. In all other zones, elevated to two feet or more above the base flood elevation.

#### 5.1.4 LOWEST FLOOR CERTIFICATION REQUIREMENTS

Upon completion of the structure, the elevation of the lowest floor including basement shall be certified by the City Building Inspector to be properly elevated. The certification shall be provided to the City Floodplain Administrator using the current FEMA Elevation Certificate.

Caliente shall follow the State of Nevada recommendations in that the certification of the Lowest Floor, including basement, shall be accomplished as soon as possible after the slab has been poured for slab on grade or when the lowest floor is completed and prior to the start of framing.

#### 5.1.5 NONRESIDENTIAL FLOODPROOFING REQUIREMENTS

Nonresidential construction shall either be elevated to conform with Section 5.1.3 or together with attendant utility and sanitary facilities:

- A. Will be floodproofed below the elevation recommended under Section 5.1.3 so that the structure is watertight with walls substantially impermeable to the passage of water;
- B. Will have the structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; or
- C. Will be certified by a registered professional engineer or architect that the standards of Section 5.1.3 are satisfied. The certification shall be provided to the City Floodplain Administrator.

#### 5.1.6 REQUIREMENTS FOR AREAS BELOW THE LOWEST FLOOR

All new construction and substantial improvements on structures within flood hazard zones 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 the entry and exit of floodwaters. Designs for meeting this requirement shall follow the guidelines in FEMA Technical Bulletins TB1-93 & TV 7-93 and must either be certified by a licensed professional engineer or architect to meet or exceed the following minimum criteria:

- A. Must have a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
- B. The bottom of all such openings will be no higher than one foot above the lowest adjacent finished grade.

Openings may be equipped with louvers, valves, screens or other coverings or devices provided they permit the automatic entry and exit of floodwaters.

#### 5.2 STANDARDS FOR UTILITIES

- A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- B. All new and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters or discharge from the systems into flood waters. Sanitary sewer and storm drainage systems for buildings that have openings below the base flood elevation shall be provided with automatic backflow valves or other automatic backflow devices that are installed in each discharge line passing through a building=s exterior wall. State of Nevada backflow regulations control.
- C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

## 5.3 STANDARDS FOR SUBDIVISIONS

- A. All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.
- B. All subdivision plans will provide the elevation of proposed structures and pads. If the site is filled above the base flood, the final lowest floor and pad elevation shall be certified by a registered professional engineer or surveyor and provided to the City Floodplain Administrator.
- C. All subdivision proposals shall be consistent with the need to minimize flood damage.
- D. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- E. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.
- F. Additionally all subdivision proposals within flood hazard zones will demonstrate, by providing a detailed hydrologic and hydraulic analyses that 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.

## 5.4 STANDARDS FOR CRITICAL STRUCTURES

Critical structures are not authorized in a Special Flood Hazard Area, unless:

A. All alternative locations in Flood Zone X have been considered and rejected.

B. All alternative locations in Flood Zone B have been considered and rejected. If the City Floodplain Manager determines the only practical alternative location for the development of a new or substantially improved critical structure is in a Special Flood Hazard Area s/he **must** give public notice of the decision and reasons for the elimination of all alternative locations.

## 5.5 STANDARDS FOR MANUFACTURED HOMES

- A. All manufactured homes that are placed or substantially improved, within Zones A, AH, AE on the City=s FIRM and 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 on a site upon which a manufactured home has incurred Asubstantial damage@ as a result of a flood:

shall be elevated on a permanent foundation so that the lowest floor will be elevated to two or more feet above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and literal movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame-ties-to-ground anchors. This requirement is in addition to applicable State and City anchoring requirements for resisting wind forces.

- B. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A, AH, and AE on the City=s FIRM that are not subject to the provisions of paragraph 5.4.A will be elevated so that either:
  - 1. The bottom of structural frame or the lowest point of the manufactured home is two feet or more above the base flood elevation; or
  - 2. The 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 and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- C. Within Zone A, when no base flood elevation data is available, new and substantially improved manufactured homes shall have the floor elevated at least three feet above the highest adjacent grade.
- D. Within Zone AO, the floor for all new and substantially improved manufactured homes will be elevated above the highest adjacent grade at least two feet higher than the depth number specified on the FIRM, or at least three feet higher than the adjacent grade if no

depth number is specified. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified for compliance by the City Building inspector.

#### 5.6 STANDARDS FOR RECREATIONAL VEHICLES

All recreational vehicles placed on sites within the floodplain on the City's FIRM will either:

- A. Be on the site for fewer than 180 consecutive days;
- B. 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
- C. Will meet the permit requirements of Section 4.3 and the elevation and anchoring requirements for manufactured homes in Section 5.5.

## 5.7 FLOODWAYS

Designated floodways are located within the special flood hazard areas established in Section 3.2. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- A. Encroachment shall be prohibited, including fill, new construction, substantial improvements, storage of equipment or supplies, and any other development within the adopted regulatory floodway; unless it has been demonstrated through hydrologic and hydraulic analyses, performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge, and the FEMA has issued a Conditional Letter of Map Revision (CLOMR).
- B. If Section 5.7A has been satisfied; all proposed new development and substantial improvements will comply with all other applicable flood hazard reduction provisions of Section 5.

## SECTION 6.0 VARIANCE PROCEDURES

#### 6.1 NATURE OF VARIANCES

- A. The variance criteria set forth in this section of the ordinance are based on the general principal of zoning law that <u>variances pertain to a piece of property with physical</u> characteristics so unusual that complying with the requirements of this ordinance would create an exceptional hardship to the applicant or to the surrounding property owners.
- B. 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.
- C. The City Council desires to help protect its citizens from flooding. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this ordinance are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

#### 6.2 APPEAL BOARD

- A. In passing upon requests for variances, the City Planning Commission and the City Council shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
  - 1. The danger of materials being swept onto other lands and injuring others;
  - 2. The danger to life and property due to flooding or erosion damage;
  - 3. The susceptibility of the proposed facility and its contents to flood damage and effect of such damage on the existing individual owner and future owners of the property;
  - 4. The importance of the services provided by the proposed facility to the community;
  - 5. The necessity to the facility of a flood damage-prone location, where applicable;
  - 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
  - 7. The compatibility of the proposed use with existing and anticipated development;
  - 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
  - 9. The safety of dry access to the property in time of flood for ordinary and emergency vehicles;
  - 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site;

- 11. The cost 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.
- B. Any applicant to whom a variance is granted shall be given written notice over the signature of the Mayor and City Council that;
  - 1. The issuance of a variance to construct a structure below the base flood level will result in increased <u>annual</u> premium rates for flood insurance up to amounts as high as \$25 per \$100 of insurance coverage (\$25,000 per \$100,000 coverage);
  - 2. Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the City Floodplain Administrator in the Office of the Lincoln County Recorder and shall be recorded in a manner so that it appears as an exception on the title of the affected parcel of land.
- C. The City Floodplain Administrator will maintain a record of all variance actions, including justification for their issuance, and report such variances issued in its biennial report submitted to the Federal Insurance Administration and FEMA.

#### 6.3 CONDITIONS FOR VARIANCES

- A. Generally, variances may be issued for new construction, substantial improvements, and other proposed new development 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, providing that the procedures of Sections 4 and 5 of the ordinance have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.
- B. Variances may be issued for the repair or rehabilitation of Ahistoric structures@ (as defined in Section 2) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- C. Variances shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.
- D. Variances shall only be issued upon a determination that the variance is the "minimum necessary" considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a <u>minimum</u> of deviation from the requirements of this ordinance. For example, in the case of variances to an elevation requirement, this means the City Council <u>need not grant</u> permission for the applicant to build at grade, or even to whatever elevation the applicant proposed, but only to that elevation which the City Council

- believes will both provide relief and preserve the integrity of the local ordinance.
- E. Variances shall only be issued upon:
  - 1. Showing of good and sufficient cause;
  - 2. A determination that failure to grant the variance would result in exceptional "hardship" (as defined in Section 2) to the applicant;
  - 3. 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 a nuisance (as defined in Section 2, "Public Safety/Nuisance"), cause fraud or victimization (as defined in Section 2) of the public, or conflict with existing local laws or ordinances.
- F. Variances may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use provided that the provisions of Sections 6.2.A through 6.2.E are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and does not result in additional threats to public safety and does not create a public nuisance.
- G. Upon consideration of all the factors of Section 6.1 C and the purposes of this ordinance, the City Council may attach such additional conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

#### SECTION 7.0 MAP REVISION/AMENDMENT PROCEDURES

#### 7.1 LETTERS OF MAP REVISION/AMENDMENT

National Flood Insurance Program regulations provide procedures to remove property from the 100-year floodplain or from a Special Flood Hazard Area. Amendments and revisions to the City's FIRM can not adversely impact the floodplain or floodway delineation's of the level of the 100-year flood.

There are several procedures provided whereby the FIA will review information from the City, an owner, or a lessee of property where it is believed the property should not be included in a Special Flood Hazard Area.

Submissions to FEMA for revisions to effective Flood Insurance Studies (FISs) by individual and community requesters will require the signing of application/certification forms. These forms will provide FEMA with assurance that all pertinent data relating to the revision is included in the submittal. They will also assure that: (a) the data and methodology are based on current conditions; (b) qualified professionals have assembled data and performed all necessary computations; and (c) all individuals and organizations impacted by proposed changes are aware of the changes and will have an opportunity to comment on them. FEMA procedures permit the following types of request:

- A. A request for a revision to the effective FIS information (FIRM, FBFM, and/or FIS report) is usually a request that FEMA replace the effective floodplain boundaries, flood profiles, floodway boundaries, etc., with those determined by the requester. Before FEMA will replace the effective FIS information with the revised, the requester must:
  - 1. Provide all of the data used in determining the revised floodplain boundaries, flood profiles, floodway boundaries, etc.;
  - 2. Provide all data necessary to demonstrate that the physical modifications to the floodplain have been adequately designed to withstand the impacts of the 1% annual chance flood event and will be adequately maintained;
  - 3. Demonstrate that the revised information (e.g., hydrologic and hydraulic analyses and the resulting floodplain and floodway boundaries) are consistent with the effective FIS information.
- B. Requests for amendments or revisions to FEMA maps must be reviewed and submitted to FEMA by the City Council of the City of Caliente along with materials and documents supplied by the applicant for a map amendment or revision required to prepare all the supporting information and appropriate FEMA forms.

The scientific or technical information to be submitted with these requests may include, but is not limited to the following:

- A. An actual copy of the recorded plat map bearing the seal of the Lincoln County Recorder's Office indicating the official recordation and proper citation, Deed or Plat Book Volume and Page Number.
- B. A topographical map showing:
  - 1. Ground elevation contours in relation to the NGVD (National Geodetic Vertical Datum).
  - 2. The total area of the property in question.
  - 3. The location of the structure or structures located on the property in question.
  - 4. The elevation of the lowest adjacent grade to a structure or structures.
  - 5. An indication of the curvilinear line which represents the area subject to inundation by a base flood. The curvilinear line should be based upon information provided by an appropriate authoritative source, such as a federal agency, Department of Water Resources, the Lincoln County Water Control District, a County or City Engineer, a Federal Emergency Management Agency Flood Insurance Study, or a determination by a Registered Professional Engineer.
- C. A copy of the FHBM or FIRM indicating the location of the property in question.
- D. A certification by a Registered Professional Engineer or Licensed Land Surveyor that the lowest grade adjacent to the structure is above the base flood elevation.
- E. The completion of the appropriate forms in the FEMA's Packets, Amendments and Revisions To National Flood Insurance Program Maps (MT-1 FEMA FORM 81-87 Series and MT-2 FEMA FORM 81-89 Series).

# Passed, Adopted and Approved this 3<sup>rd</sup> day of December, 2009.

The above and foregoing ordinance was first proposed and read by title to the City Council on the 5<sup>th</sup> day of November, 2009. City of Caliente Bill 2009-5, Ordinance 166 was published in Lincoln County Record on November 19<sup>th</sup> and 26<sup>th</sup>, 2009. At the regular Meeting of the City Council on December 3<sup>rd</sup>, 2009, the proposed ordinance was read by title to the City Council as first introduced and adopted by the following vote:

## Councilmen Voting "Aye"

Mayor Keith Larson, Councilman Ashley Moore, Councilman Evan Schimbeck, Councilman Victor Jones.

Councilmen Voting "Nay" None

Approved:

ason 

Keith Larson, Mayor

Councilmen Absent: Councilman Acklin

Attest:

Patrice Lytle, City Clerk