ORDINANCE NO. 2914

AN ORDINANCE OF THE CITY OF REDLANDS AMENDING CHAPTER 15.32 OF THE REDLANDS MUNICIPAL CODE RELATING TO FLOOD DAMAGE PREVENTION AND FLOODPLAIN MANAGEMENT

THE CITY COUNCIL OF THE CITY OF REDLANDS DOES ORDAIN AS FOLLOWS:

Section 1. Section 15.32.100 of the Redlands Municipal Code, titled "Chief Building Official; Duties and Responsibilities," is hereby amended to read as follows:

"15.32.100: CHIEF BUILDING OFFICIAL; DUTIES AND RESPONSIBILITIES:

The chief building official, as the designated floodplain administrator, shall administer, implement, and enforce this chapter by granting or denying development permits in accordance with its provisions and the chief building official duties and responsibilities shall include, but not be limited to:

A. Permit Review:

- 1. Review all development permits to determine that the permit requirements of this chapter have been satisfied;
- 2. Ensure that all other state and federal permits have been obtained;
- 3. Determine that the site is reasonably safe from flooding; and
- 4. 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 (1') at any point.

B. Review, Use and Development of Other Base Flood Data:

- 1. When base flood elevation data has not been provided in accordance with section 15.32.040 of this chapter, the chief building official shall obtain, review and utilize any base flood elevation and floodway data available from a federal, state or other sources, or if no base flood elevation data is available from a federal or state agency or other source, in order to administer section 15.32.110 of this chapter. Any such information shall be submitted to the city for adoption; or
- 2. If no base flood elevation data is available from a federal or state agency or other source, then a base flood elevation shall be obtained using one of the two (2) methods from the FEMA publication "Managing Floodplain Development In Approximate Zone A Areas-A Guide Of Obtaining And Developing Base (100-Year) Flood Elevations" dated July 1995, in order to administer section 15.32.110 of this chapter.

a. Simplified method:

- (1) 100-year or base flood discharge shall be obtained using the appropriate regression equation found in a U.S. geological survey publication, or the discharge-drainage area method; and
- (2) Base flood elevation shall be obtained using the Quick-2 computer program developed by FEMA; or

b. Detail method:

- (1) 100-year or base flood discharge shall be obtained using the U.S. army corps of engineers' HEC-HMS computer program; and
- (2) Base flood elevation shall be obtained using the U.S. army corps of engineers' HEC-RAS computer program.

C. Notification of Other Agencies:

1. Alteration or relocation of a watercourse:

- a. Notify adjacent communities and the California Department of Water Resources prior to alteration or relocation;
- b. Submit evidence of such notification to the FEMA; and
- c. Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

2. Base Flood Elevation changes due to physical alterations:

- a. 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).
- b. 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.

3. Changes in corporate boundaries:

- a. Notify FEMA in writing whenever the corporate boundaries have been modified by annexation or other means and include a copy of a map of the community clearly delineating the new corporate limits.
- D. Documentation of Floodplain Development: Obtain and maintain for public inspection and make available as needed the following:

- 1. Certification required by sections 15.32.110 and 15.32.140 of this chapter (lowest floor elevations);
- 2. Certification required by subsection 15.32.110C4 of this chapter (elevation or floodproofing of nonresidential structures);
- 3. Certification of elevation required by subsection 15.32.110C5 of this chapter (wet floodproofing standards);
- 4. Certification of elevation required by section 15.32.130, "Subdivision Standards", of this chapter;
- 5. Certification required by section 15.32.160 of this chapter (floodway encroachments);
- 6. Reports required by section 15.32.170 of this chapter (mudflow standards).
- E. Map Determinations: Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). Any person contesting the location of a boundary shall be given a reasonable opportunity to appeal the interpretation as provided in sections 15.32.180 and 15.32.190 of this chapter.
- F. Remedial Action: Take action to remedy violations of this chapter."

Section 2. Section 15.32.110 of the Redlands Municipal Code, titled "Construction Standards," is hereby amended to read as follows:

"15.32.110: CONSTRUCTION STANDARDS:

In all areas of special flood hazards the following standards are required:

A. Anchoring:

- 1. 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.
- 2. All manufactured homes shall meet the anchoring standards of section 15.32.140 of this chapter.

B. Construction Materials and Methods:

- 1. All new construction and substantial improvements shall be constructed with flood resistant materials and utility equipment resistant to flood damage;
- 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage;
- 3. 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; and
- 4. If within zone AH or AO, adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

C. Elevation and Flood Proofing:

- 1. Residential construction, new or substantial improvement of any structure in zone AE, AH, or A1-30 shall have the lowest floor, including basement, elevated two feet (2') above the base flood elevation. Upon the completion of the structure the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, or verified by the chief building official to be properly elevated.
- 2. Residential construction, new or substantial improvement, of any structure in zone AO shall have the lowest floor, including basement, elevated above the highest adjacent grade to a height exceeding the depth number specified in feet on the FIRM by at least two feet (2'), or elevated at least four feet (4') above the highest 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 by a registered professional engineer or surveyor, or by the chief building official to be properly elevated.
- 3. Residential construction, new or substantial improvement of any structure in zone A shall have the lowest floor, including basement, be elevated at least two feet (2') above the base flood elevation. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, or by the chief building official to be properly elevated.
- 4. Nonresidential construction, new or substantial improvement, shall either be elevated in conformance with subsection C1 or C2 of this section or together with attendant utility and sanitary facilities be flood proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water, have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, and be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the chief building official.
- 5. All new construction and substantial improvements, that fully enclose 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 either be certified by a registered professional engineer or architect and must meet or exceed the following minimum criteria:
 - a. Have a minimum of two (2) openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one foot (1') above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters; or
 - b. Be certified by a registered professional engineer or architect.
- 6. Manufactured homes shall satisfy the standards in section 15.32.140 of this chapter."
- <u>Section 3.</u> Section 15.32.190 of the Redlands Municipal Code, titled "Variance Conditions," is hereby amended to read as follows:

"15.32.190: VARIANCE CONDITIONS:

- A. Generally, variances may be issued for new construction and substantial improvements, and other proposed new development to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing sections 15.32.090 through 15.32.170 of this chapter have been fully considered. As the lot size increases beyond one-half (1/2) acre, the technical justification required for issuing the variance increases.
- B. Variances may be issued for the reconstruction, rehabilitation or restoration of historic structures listed in the national register of historic places or the state inventory of historic places, upon a determination that the proposed reconstruction, rehabilitation or restoration will not preclude the structure's continued designation as a 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 designated 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.
- E. Variances shall be issued upon:
 - 1. A showing of good and sufficient cause;
 - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - 3. A determination that the granting of a variance would 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.
- F. Variances 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 provisions of this chapter are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and creates no additional threats to public safety and does not create a public nuisance.
- G. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
 - 1. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as twenty five dollars (\$25) for one hundred dollars (\$100) of insurance coverage, and
 - 2. Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the Flood Plain Administrator in the Office of the San Bernardino County Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

H. The 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 Emergency Management Agency."

<u>Section 2.</u> The Mayor shall sign this ordinance and the City Clerk shall certify to the adoption of this ordinance and shall cause it, or a summary of it, to be published once in the Redlands Daily Facts, a newspaper of general circulation within the City, and thereafter, this ordinance shall take effect as provided by law.

Paul W. Foster, Mayor

ATTEST:

Jeanne Donaldson, City Clerk

I, Jeanne Donaldson, City Clerk of the City of Redlands, hereby certify that the foregoing Ordinance was duly adopted by the City Council at a regular meeting thereof held on the 1st day of September, 2020.

AYES:

Councilmembers Barich, Tejeda, Momberger, Davis; Mayor Foster

NOES:

None

ABSENT: ABSTAINED: None

None

Jeanne Donaldson, City Clerk