

ORDINANCE NO. CS-373

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CARLSBAD, CALIFORNIA, APPROVING A ZONE CODE AMENDMENT AND LOCAL COASTAL PROGRAM AMENDMENT TO ENSURE CONSISTENCY WITH FEDERAL GUIDELINES RELATED TO FLOODPLAIN MANAGEMENT REGULATIONS.

CASE NAME: FLOODPLAIN MANAGEMENT REGULATIONS
AMENDMENTS

CASE NO.: ZCA 2019-0001/LCPA 2019-0004 (PUB2019-0010)

WHEREAS, the city planner has prepared a Zone Code Amendment (ZCA 2019-0001)/Local Coastal Program Amendment (LCPA 2019-0004) pursuant to Chapter 21.52 of the Carlsbad Municipal Code, Section 30514 of the Public Resources Code, and Section 13551 of California Code of Regulations Title 14, Division 5.5; and

WHEREAS, the Carlsbad Zone Code is the implementing ordinance of the Carlsbad Local Coastal Program, and therefore, an amendment to the Zone Code also constitutes an amendment to the Local Coastal Program; and

WHEREAS, pursuant to California Coastal Commission Regulations, a six-week public review period for the Local Coastal Program Amendment began on Nov. 22, 2019 and ended on Jan. 3, 2020; and

WHEREAS, on Dec. 4, 2019, the Planning Commission held a duly noticed public hearing as prescribed by law to consider ZCA 2019-0001/LCPA 2019-0004; and

WHEREAS, the Planning Commission adopted Planning Commission Resolution No. 7353 recommending to the City Council that ZCA 2019-0001/LCPA 2019-0004 be approved; and

WHEREAS, the Municipal Code and City Council Policy Update Subcommittee met on Feb. 19, 2020 and again on March 9, 2020 to review the proposed code changes and recommend minor clarifying modifications to the proposed amendment to the Floodplain Management Regulations Zoning Ordinance; and

WHEREAS, the City Council of the City of Carlsbad held a duly noticed Public Hearing as prescribed by law to consider ZCA 2019-0001/LCPA 2019-0004; and

WHEREAS, at said Public Hearing, upon hearing and considering all testimony and arguments, if any, of all persons desiring to be heard, the City Council considered all factors, including written public comments, if any, related to ZCA 2019-0001/LCPA 2019-0004; and

WHEREAS, the findings of the Planning Commission in Resolution No. 7353 constitute the findings of the City Council in this matter.

NOW THEREFORE, the City Council of the City of Carlsbad, California, ordains as follows that:

1. The above recitations are true and correct.
2. The findings of the Planning Commission in Planning Commission Resolution No. 7353 shall also constitute the findings of the City Council.
3. Carlsbad Municipal Code Section 21.110 is amended to read as follows:

21.110.010 Statutory authorization.

This chapter is adopted pursuant to the legislative authority set forth in [Government Code](#) Sections 65302, 65560 and 65800 which conferred upon local government units authority to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. (Ord. NS-39 § 1, 1988)

21.110.030 Statement of purpose.

- (a) The floodplain management regulations are necessary due to the following facts:
 - (1) The flood hazard areas of the city are subject to periodic inundation that may result in loss of life and property, health and safety hazards, disruption of commerce and governmental 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.
 - (2) These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards that increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood-proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.
- (b) It is the purpose of this chapter 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:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood-control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- (6) To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (7) To ensure that potential buyers are notified that property is in an area of special flood hazard;
- (8) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions; and
- (9) Recognize floodplain areas as potential open space resources and encourage compatible open space uses wherever possible. (Ord. CS-102 § CXXIII, 2010; Ord. NS-39 § 1, 1988)

21.110.040 Methods of reducing flood losses.

In order to accomplish its purposes, this chapter includes methods and provisions for:

- (1) Restricting or prohibiting 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;
- (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel floodwaters;
- (4) Controlling filling, grading, dredging and other development which may increase flood damage; and
- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (Ord. NS-39 § 1, 1988)

21.110.050 Definitions.

For the purposes of this chapter, the following words and phrases have the meaning respectively ascribed to them by this section:

- (1) "1-percent-annual-chance flood" means the flood having one chance in 100 of being equaled or exceeded in any one-year period (also known as the 100-year flood or base flood).
- (2) "Appeal" means a request for a review of the floodplain administrator's interpretation of any provision of this chapter or a request for a variance.

- (3) "Area of shallow flooding" means a designated A, AO, AH or VE zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident.
- (4) "Area of special flood-related erosion hazard" means the area subject to severe flood related erosion losses. The area is designated as zone E on the Flood Insurance Rate Map (FIRM).
- (5) "Area of special mudslide (i.e., mudflow) hazard" means the area subject to severe mudslides (i.e., mudflows). The area is designated as zone M on the Flood Insurance Rate Map (FIRM).
- (6) "Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year (also called the 1-percent-annual-chance or 100-year flood).
- (7) "Basement" means any area of the building having its floor subgrade (below ground level) on all sides.
- (8) "Breakaway walls" means any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which is not part of the structural support of the building and which is designed to break away under abnormally high tides or wave action without causing any damage to the structural integrity of the building on which they are used or any buildings to which they might be carried by floodwaters. A breakaway wall shall have a safe design loading resistance of not less than ten and no more than twenty pounds per square foot. Use of breakaway walls must be certified by a registered engineer or architect and shall meet the following conditions:
- (A) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 - (B) The elevated portion of the building shall not incur any structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.
- (9) "Coastal high hazard area" means the area subject to high velocity waters, including coastal and tidal inundation or tsunamis. The area is designated on a Flood Insurance Rate Map (FIRM) as zone V1-30, VE or V.
- (10) "Critical Facility" means those city or community servicing facilities that are vital to the continued delivery of key city service, or that may significantly affect the city's ability to recover from the disaster. These facilities include schools (hosting shelters), and buildings such as jails, law enforcement centers, and public services buildings.
- (11) "Development" means any manmade 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.
- (12) "Encroachment" means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain which may impede or alter the flow capacity of a floodplain.
- (13) "Existing manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the

construction of streets and either final site grading or the pouring of concrete pads) was completed before October 11, 1988.

(14) "Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads).

(15) "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas due to:

(A) The overflow of floodwaters

(B) The unusual and rapid accumulation or runoff of surface waters from any source

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

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

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

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

(19) "Floodplain" or "flood-prone area" means any land area susceptible to being inundated by water from any source. (See definition of flood above).

(20) "Floodplain management" means the operation of an overall program of corrective and preventive measures of reducing flood damage including, but not limited to, emergency preparedness plans, flood control works and floodplain management regulations.

(21) "Floodplain management regulations" means zoning chapters, subdivision regulations, building codes, health regulations, special purpose chapters (such as floodplain chapter, grading chapter and erosion control chapter) and other applications of police power. The term describes such state or local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

(22) "Floodproofing" means any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

(23) "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. Also referred to as "regulatory floodway."

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

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

(26) "Historic structure" means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. 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;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
4. 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.

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

(A) An unfinished or flood-resistant enclosure below the lowest floor that is usable solely for parking of vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor provided it conforms to applicable non-elevation design requirements, including, but not limited to:

- (i) The anchoring standards in Section 21.110.160(1);
- (ii) The construction materials and methods standards in Section 21.110.160(2);
- (iii) The wet flood proofing standard in Section 21.110.160(3); and
- (iv) The standards for utilities in Section 21.110.170.

(28) "Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term "manufactured home" does not include park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty consecutive days.

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

(30) "Mean sea level" means the average level of the surface of the ocean from which heights such as elevation may be measured based on, the National Geodetic Vertical Datum (NGVD) of 1929, the North American Vertical Datum (NAVD) of 1988, or other datum to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

(31) "New construction" shall mean, solely for the purposes of FEMA determining National Flood Insurance Program insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after October 11, 1988, whichever is later, and includes any subsequent improvements to such structures.

(32) "New manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads) is completed on or after October 11, 1988.

(33) "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.

(34) "Recreational vehicle" means a vehicle which is:

- a. Built on a single chassis
- b. Four hundred square feet or less when measured at the largest horizontal projection
- c. Designed to be self-propelled or permanently towable by a light-duty truck; and
- d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

(35) "Remedy a violation" means to bring the structure or other development into compliance with state or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing state or federal financial exposure with regard to the structure or other development.

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

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

(38) "Special flood hazard area (SFHA)" means an area having special flood or flood-related erosion hazards, and shown on a FIRM as Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE, and V.

(39) "Start of construction" means and includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installations of piles, the

construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footing, 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. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes not within a mobile home park or mobile home subdivisions, "start of construction" means the affixing of the mobile home to its permanent site. For mobile homes within mobile home parks or mobile home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

(40) "Structure" means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

(41) "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent of the market value of the structure before the damage occurred.

(42) "Substantial improvement" means any reconstruction, rehabilitation, addition, or other proposed new development of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures, which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

(A) Any project for improvement of a structure to correct existing violations or state or local health, sanitary or safety code specifications which have been identified by the applicable code enforcement officials and which are the minimum necessary to assure safe living conditions; or

(B) Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

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

(44) "Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this chapter is presumed to be in violation until such time as that documentation is provided. (Ord. NS-664 §§ 1, 2, 2003; Ord. NS-39 § 1, 1988)

21.110.060 Applicability.

This chapter shall apply to all areas of special flood hazard areas, areas of flood-related erosion hazards, areas of mudslide (i.e., mudflow) hazards and any areas identified by the city subject to a 1-percent-annual-chance-flood within the jurisdiction of the city. When only a portion of a parcel of land lies within the areas of special flood hazards, the provisions of this chapter shall apply only to that portion lying within those areas. (Ord. NS-39 § 1, 1988)

21.110.070 Basis for establishing the areas of special flood hazard.

The special flood hazard area (SFHA) identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the San Diego County and incorporated areas Flood Insurance Study (FIS), dated December 20, 2019, and accompanying Flood Insurance Rate Map (FIRM), dated December 20, 2019 and all subsequent amendments and/or revisions are hereby adopted by reference and declared to be a part of this chapter. SFHA include Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE, and V. The FIS and attendant mapping is the minimum area of applicability of this chapter and may be supplemented by studies for other areas that allow implementation of this chapter and are recommended to the city council by the floodplain administrator. The FIS and FIRM are on file in the office of the city engineer in Carlsbad, California, 92008. (Ord. NS-664 § 3, 2003; Ord. NS-39 § 1, 1988)

21.110.080 Compliance.

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Nothing in this chapter shall prevent the city from taking such lawful action as is necessary to prevent, enjoin or remedy any violation. (Ord. NS-39 § 1, 1988)

21.110.090 Abrogation and greater regulations.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this chapter and other chapter, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. NS-39 § 1, 1988)

21.110.100 Interpretation.

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

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes. (Ord. NS-39 § 1, 1988)

21.110.110 Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards, areas of flood-related erosion hazards and areas of mudslide (i.e., mudflow) hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder. (Ord. NS-39 § 1, 1988)

21.110.130 Special use permit.

- A. Special Use Permit Required. A special use permit shall be obtained in addition to any other required permits or entitlements before construction or development begins within any special flood hazard areas, areas of flood-related erosion hazards or areas of mudslide (i.e., mudflow) hazards established in Section 21.110.070.
 - 1. Exception. The maintenance, repair or replacement of existing previously-permitted boat docks is not subject to the requirement to obtain a special use permit, provided that the boat dock pilings will remain in place as part of the proposed work.
- B. Permit procedures. Procedures for special use permit shall be subject to the development permit procedures in Chapter 21.54 and 21.58, including the following:
 - 1. Applications and fees,
 - 2. Decision making authority,
 - 3. Expiration, extensions, and amendments
- C. Special application requirements. An application for a special use permit shall:
 - 1. Be accompanied by plans showing the nature, location, dimensions and elevation of the project site; existing or proposed structures, fill, storage of materials, drainage facilities; and all other materials as specified by the city planner. Specifically, the following information must be provided:
 - a. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; in zone AO or VO, elevation of highest adjacent grade and proposed elevation of lowest floor of all structures;
 - b. Proposed elevation in relation to mean sea level to which any structure will be floodproofed;
 - c. All appropriate certifications listed in Section 21.110.150(D) of this chapter;
 - d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development;
 - e. Environmental impact assessment
 - f. Environmental impact report, if required; and

- g. Certification by a registered professional engineer/architect that all design and methods of construction meet elevation and anchoring standards per the code of federal regulations (Title 44 Section 60.3). (Ord. CS-164 § 10, 2011; Ord. CS-102 § CXXIV, 2010; Ord. NS-39 § 1, 1988)

D. Administration. Administrative procedures related to the processing of a minor nonresidential planned development permit and nonresidential planned development permit shall be subject to Chapters 21.54.060 and 21.54.061, including the following:

1. Notices and hearings,
2. Announcement of decision,
3. Effective date and appeals.

E. Findings for approval of a Special Use Permit. A special use permit required by this chapter may be approved or conditionally approved by the city planner, upon the advice of the floodplain administrator and only if the following findings are made:

- (1) The project is consistent with the general plan, local coastal program, the requirements of this chapter, and any other applicable requirement of this code.
- (2) The site is reasonably safe from flooding.
- (3) The project is designed to minimize the flood hazard to the habitable portions of the proposed structure.
- (4) The proposed project does not create a hazard for adjacent or upstream properties or structures.
- (5) The proposed project does not create any additional hazard or cause adverse impacts to downstream properties or structures.
- (6) The proposed project does not reduce the ability of the site to convey or handle a base flood of a 1-percent-annual-chance flood.
- (7) The cumulative effect of the proposed project when combined with all the other existing, proposed, and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point.
- (8) The project is contingent upon compliance with other federal and state regulations as required. (Ord. CS-164 § 10, 2011; Ord. CS-102 § CXXV, 2010)

21.110.140 Designation of floodplain administrator.

The city engineer is appointed as the floodplain administrator. (Ord. CS-102 § CXXVI, 2010; Ord. NS-39 § 1, 1988)

21.110.150 Duties and responsibilities of the floodplain administrator.

The duties and responsibilities of the floodplain administrator shall include, but not be limited to:

A. Permit Review. The floodplain administrator shall review all development permits to determine:

1. The permit requirements of this chapter have been satisfied, including determination of substantial improvement and substantial damage of existing structures;
2. All other required state and federal permits have been obtained;
3. The site is reasonably safe from flooding;
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. This means that the cumulative effect of the proposed development when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than 1 foot at any point within the City of Carlsbad; and
5. Where base flood elevations are changed 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 Letters of Map Revision (LOMR's) for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

B. Advise Decision-Making Authority. The floodplain administrator shall advise the decision-making authority regarding the proposed development.

C. Review, Use and Development of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 21.110.070, the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 21.110.160 through 21.110.230 of this chapter. Any such information shall be submitted to the city council for adoption.

D. Notification of Other Agencies. Whenever a watercourse is to be altered or relocated:

- (A) Notify adjacent communities and the California Department of Water Resources prior to the alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;
- (B) Require that the flood-carrying capacity of the altered or relocated portion of such watercourse is maintained.

- E. Documentation of Floodplain Development. Obtain and maintain for public inspection and make available as needed:
- (A) The certification required in Section 21.110.160(3)(A), floor elevations;
 - (B) The certification required in Section 21.110.160(3)(B), elevations in areas of shallow flooding;
 - (C) The certification required in Section 21.110.160(3)(C), elevations or floodproofing of nonresidential structures;
 - (D) The certification required in Section 21.110.160(3)(D), wet floodproofing standard;
 - (E) The certified elevation required in Section 21.110.180(b), subdivision standards;
 - (F) The certification required in Section 21.110.200(1), floodway encroachments;
 - (G) The information required in Section 21.110.210(6), coastal construction; and
 - (H) The reports required in Section 21.110.220(d), mudflow standards.
- F. Map Determinations. Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards, areas of special flood-related erosion hazards or areas of mudslide (i.e., mudflow) hazards, for example, where there appears to be a conflict between a mapped boundary and actual field conditions. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 21.110.240 of this chapter.
- G. Remedy Action. Take action to remedy violations of this chapter as specified in Section 21.110.080 of this chapter. (Ord. CS-102 § CXXVII, 2010; Ord. NS-39 § 1, 1988)
- H. Biennial Report. Complete and submit Biennial Report to FEMA.
- I. Planning. Assure the General Plan is consistent with the floodplain management objectives herein.

21.110.160 Standards of construction.

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

- (1) Anchoring.
 - (A) All new construction and substantial improvements, including manufactured homes, shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
 - (B) All manufactured homes shall meet the anchoring standards of Section 21.110.190.
- (2) Construction Materials and Methods.
 - (A) All new construction and substantial improvements, including manufactured homes, shall be constructed with materials and utility equipment resistant to flood damage for areas below the base flood elevation plus two feet of freeboard.

(B) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage for areas below the base flood elevation plus two feet of freeboard.

(C) All new construction and substantial improvements, including manufactured homes, shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(D) Require within zones AH, AO or VE, adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

(3) Elevation and Floodproofing.

(A) New construction and substantial improvement of any structure shall have the lowest floor, including basement, elevated two feet above the base flood elevation. Nonresidential structures may meet the standards in subsection (3)(C) of this section. 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 city building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.

(B) New construction and substantial improvement of any structure in Zone AO and AE shall have the lowest floor, including basement, elevated above the highest adjacent grade or two feet above the base flood elevation. Nonresidential structures may meet the standards in subsection (3)(C) of this section. Upon 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 city building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.

(C) In a Zone VE, the lowest horizontal support member shall be elevated at least two feet above the base flood elevation. Upon completion of the *structure* the elevation shall be certified by a registered professional engineer or surveyor or verified by the city *building* inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.

(D) In an A (Unnumbered/Approximate A Zone) Zone, without base flood elevations specified on the FIRM, elevated at least two feet above the base flood elevation. Upon completion of the *structure* the elevation shall be certified by a registered professional engineer or surveyor or verified by the city *building* inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.

(E) Nonresidential construction, including substantial improvements, shall either be elevated in conformance with subsection (3)(A) or (3)(B) of this section or together with attendant utility and sanitary facilities:

- (i) Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- (ii) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- (iii) Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the floodplain administrator.

(F) Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that 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 must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

- (i) Either 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 shall be provided. The bottom of all openings shall be no higher than one foot 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
- (ii) Be certified to comply with a local floodproofing standard approved by the Federal Insurance Administration.

(G) Manufactured homes shall also meet the standards in Section 21.110.190 of this chapter.

(H) Garages and low cost accessory structures

a. Attached garages.

1. A garage attached to a residential structure, constructed with the garage floor slab below the base flood elevation must be designed to allow for the automatic entry of flood waters. Areas of the garage below the base flood elevation must be constructed with flood resistant materials.

2. A garage attached to a nonresidential structure must meet the above requirements or be dry floodproofed. For guidance on below grade parking areas, see FEMA Technical Bulletin TB-6.

b. Detached garages and accessory structures.

1. "Accessory structures" used solely for parking (2 car detached garages or smaller) or limited storage (small, low-cost sheds) may be constructed such that its floor is below the base flood elevation provided the structure is designed and constructed in accordance with the following requirements:

- a. Use of the accessory structure must be limited to parking or limited storage;
- b. The portions of the accessory structure located below the base flood elevation must be built using flood-resistant materials;

- c. The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;
- d. Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the base flood elevation plus two feet freeboard; and
- e. The accessory structure must be designed to allow for the automatic entry of flood waters.

(Ord. NS-39 § 1, 1988)

21.110.170 Standards for utilities.

- (a) All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.
- (b) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. (Ord. NS-39 § 1, 1988)

21.110.180 Standards for subdivisions.

- (a) All preliminary subdivision proposals, including proposals for manufactured home parks and subdivisions, greater than 50 lots or 5 acres, whichever is less, shall identify the flood hazard area and the elevation of the base flood.
- (b) All final subdivision plans will provide the elevation of proposed structure(s) and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a registered professional engineer or surveyor and provided to the 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. (Ord. NS-39 § 1, 1988)

21.110.190 Standards for manufactured homes.

A. **Elevated Above Flood Elevation.** All manufactured homes that are placed or substantially improved, on sites located:

1. Outside of a manufactured home park or subdivision;
2. In a new manufactured home park or subdivision;
3. In an expansion to an existing manufactured home park or subdivision; or

4. In an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall:

- a. Within Zones A1-30, AH, and AE on the community's Flood Insurance Rate Map, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated two feet above the base flood elevation and be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- b. Within Zones V1-30, V, and VE on the community's Flood Insurance Rate Map, meet the requirements of Section 21.110.210.

B. Elevated Above Flood Elevation or Reinforced Piers. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH, AE, V1-30, V, and VE on the community's Flood Insurance Rate Map that are not subject to the provisions of Section 21.110.190.A above will be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement, and be elevated so that either the:

1. Lowest floor of the manufactured home is elevated two feet above the base flood elevation; or
2. 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.

C. Certification of Proper Elevation. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered civil engineer or licensed land surveyor and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator. (Ord. NS-39 § 1, 1988)

21.110.195 – Standards for Recreational Vehicles.

A. All recreational vehicles placed in Zones A1-30, AH, AE, V1-30 and VE will either:

1. Be on the site for fewer than 180 consecutive days; or
2. 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

3. Meet the permit requirements of Section 21.110.130 of this ordinance and the elevation and anchoring requirements for manufactured homes in Section 21.110.190.

B. Recreational vehicles placed on sites within Zones V1-30, V, and VE on the community's Flood Insurance Rate Map will meet the requirements of Section 21.110.195.A and Section 21.110.210.

21.110.200 Floodways.

Located within the special flood hazard area established in Section 21.110.070 are areas designated as floodways. 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:

- (1) Until a regulatory floodway is adopted in Zone A Areas, no new construction, substantial development, or other development (including fill) shall be permitted within Zones A1-30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than 1 foot at any point within the City of Carlsbad.
- (2) Within an adopted regulatory floodway, the city shall prohibit encroachments, including fill, new construction, substantial improvements and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (3) If subsection 1 and 2 of this section is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Sections 21.110.160 through 21.110.230 of this chapter. (Ord. NS-39 § 1, 1988)

21.110.210 Coastal high hazard areas.

Within coastal high hazard areas, Zones V, V1-30 and VE, as established in Section 21.110.070, the following standards shall apply:

- (1) All new construction and substantial improvements shall be elevated on adequately anchored pilings or columns and securely anchored to such pilings or columns so that the lowest horizontal portion of the structural members of the lowest floor (excluding the pilings or columns) is elevated two feet above the base flood elevation. All critical facilities shall be elevated three feet above the base flood elevation.
- (2) All new construction shall be located on the landward side of the reach of mean high tide and shall remain consistent with all requirements of the Local Coastal Program as the mean high tide line rises as a result of sea level rise.
- (3) All new construction and substantial improvements shall have the space below the lowest floor free of obstructions or constructed with breakaway walls. Such temporarily enclosed space shall not be used for human habitation and useable only for parking of vehicles, building access, or storage.
- (4) No new basements, expansion of existing basements, or improvements to existing basements shall be allowed in the AE or VE zones.
- (5) No fill shall be permitted in coastal high hazard areas.

(6) Manmade alterations of sand dunes which would increase potential flood damage is prohibited.

(7) The floodplain administrator shall obtain and maintain the following records:

(A) Certification by a registered engineer or architect that a proposed structure complies with Section 21.110.210(1).

(B) The elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings or columns) of all new and substantially improved structures, and whether such structures contain a basement. (Ord. NS-39 § 1, 1988)

21.110.220 Mudslide (i.e., mudflow) prone areas.

(a) The floodplain administrator shall review permits for proposed construction or other development to determine if it is proposed within a mudslide area.

(b) Permits shall be reviewed to determine that the proposed development is reasonably safe from mudslide hazards. Factors to be considered in making this determination include, but are not limited to:

- (1) The type and quality of soils;
- (2) Evidence of groundwater or surface water problems;
- (3) The depth and quality of any fill;
- (4) The overall slope of the site; and
- (5) The weight that any proposed development will impose on the slope.

(c) Within areas that have mudslide hazards, the following requirements apply:

- (1) A site investigation and further review shall be made by a person qualified in geology and soils engineering;
- (2) The proposed grading, excavation, new construction and substantial improvements shall be adequately designed and protected against mudslide damages;
- (3) The proposed grading, excavations, new construction and substantial improvements do not aggravate the existing hazard by creating either on-site or off-site disturbances; and
- (4) Drainage, planting, watering and maintenance shall not endanger slope stability.

(d) When the Federal Insurance Administrator has delineated zone M (special mudslide hazard area) on the Flood Insurance Rate Map, the community shall adopt and enforce a grading ordinance or regulation in accordance with data supplied by the Federal Insurance Administrator at least complies with the standards of Appendix J - Grading of the most recent amendment of the 2019 California Building Code, Title 24, Part 2, Volume 2:

- (1) Regulates the location of foundation and utility systems of new construction and substantial improvements;
- (2) Regulates the location, drainage and maintenance of all excavations, cuts and fills and planted slopes;
- (3) Provides special requirements for protective measures including, but not limited to, retaining walls, buttress fills, subdrains, diverter terraces, benchings, etc.; and

- (4) Requires engineering drawings and specifications to be submitted for all corrective measures, accompanied by supporting soils engineering and geology reports. (Ord. NS-39 § 1, 1988)

21.110.230 Flood-related erosion-prone areas.

- (a) The floodplain administrator shall require permits for proposed construction and other development within all flood-related erosion-prone areas as known to the community.
- (b) Such permits shall be reviewed to determine whether the proposed site alterations and improvements will be reasonably safe from flood-related erosion and will not cause flood-related erosion hazards or otherwise aggravate the existing hazard.
- (c) If a proposed improvement is found to be in the path of flood-related erosion or would increase the erosion hazard, such improvement shall be relocated or adequate protective measures shall be taken to avoid aggravating the existing erosion hazard.
- (d) Within Zones AE, AO and VE on the effective Flood Insurance Rate Map, a setback is required for all new development from the ocean, lake, bay, riverfront or other body of water to create a safety buffer consisting of a natural vegetative or contour strip. This buffer shall be designated according to the flood-related erosion hazard and erosion rate, in relation to the anticipated useful life of structures, and depending upon the geologic, hydrologic, topographic and climatic characteristics of the land. The buffer may be used for suitable open space purposes, such as for agricultural, forestry, outdoor recreation and wildlife habitat areas, and for other activities using temporary and portable structures only. (Ord. NS-39 § 1, 1988)

21.110.240 Variances.

- A. Variances from the requirements of this chapter may be granted pursuant to the provisions of this section and Chapter 21.50 of this title.
- B. Subject to the findings specified in Chapter 21.50 and subsection D of this section, variances may be granted for:
 - 1. New construction, substantial improvement, 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. As the lot size increases beyond one half acre, the technical justification required for issuing a variance increases.
 - 2. Repair or rehabilitation of historic structures, as defined in Chapter 21.110.050, upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the exception is the minimum necessary to preserve the historic character and design of the structure.

C. **Variance considerations.** When making decisions on requests for variances, the decision-making authority shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger of life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity to the facility of a waterfront 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 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; and
- (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

D. **Variance findings.** In addition to the findings specified in Chapter 21.50, no variance from the requirements of this chapter may be granted unless the decision-making authority finds:

1. That the variance is for floodplain management purposes only.
2. That there is a showing of good and sufficient cause;
3. That the variance is the minimum necessary considering the flood hazard, to afford relief.
 - a. "Minimum necessary" as related to this section, means to afford relief with a minimum of deviation from the requirements of this chapter. For example, in the case of a variance from an elevation requirement, the decision-making authority need not grant permission for the applicant to build to the elevation the applicant proposes, but only to that elevation which the decision-making authority believes will both provide relief and preserve the intent of this chapter.
4. That the physical characteristics of the subject property are so unusual that complying with the requirements of this ordinance would create an exceptional hardship to the applicant.

- a. "Hardship" as related to this section, means the exceptional hardship that would result from a failure to grant the requested variance. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting 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.
5. That the subject property's physical characteristics are unique to the property and not shared by adjacent parcels, and pertain to the land itself, not to the structure, its inhabitants, or the property owners.
6. 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, cause "fraud and victimization" of the public, or conflict with existing local laws or ordinances.
 - a. "Public safety" and "nuisance" as related to this section, means that the granting of a variance must not result in anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.
 - b. "Fraud and victimization" as related to this section, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the decision-making body shall consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for fifty to one hundred years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.
7. If applicable, that the proposed repair or rehabilitation of a historic structure 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.

E. **Variance conditions.** The decision-making authority may require conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

F. Applicant Notice.

1. Pursuant to Title 44 Part 60.6(a)(5) of the Code of Federal Regulations, following the granting of a variance, the city shall provide written notice to the applicant stating that:
 - a. 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 \$25 for \$100 of insurance coverage, and
 - b. Such construction below the base flood level increases risks to life and property.
2. The written notice required by this subsection shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

G. Record of Variances. The Floodplain Administrator shall maintain a record of all variances, including justification for their issuance, and report such variances in its biennial report submitted to FEMA.

EFFECTIVE DATE OF THIS ORDINANCE APPLICABLE TO PROPERTIES OUTSIDE THE COASTAL ZONE: This ordinance shall be effective thirty days after its adoption; and the City Clerk shall certify the adoption of this ordinance and cause the full text of the ordinance or a summary of the ordinance prepared by the City Attorney to be published at least once in a newspaper of general circulation in the City of Carlsbad within fifteen days after its adoption.

EFFECTIVE DATE OF THIS ORDINANCE APPLICABLE TO PROPERTIES INSIDE THE COASTAL ZONE: This ordinance shall be effective thirty days after its adoption or upon Coastal Commission approval of LCPA 2019-0004, whichever occurs later; and the City Clerk shall certify the adoption of this ordinance and cause the full text of the ordinance or a summary of the ordinance prepared by the City Attorney to be published at least once in a newspaper of general circulation in the City of Carlsbad within fifteen days after its adoption.

INTRODUCED AND FIRST READ at a Regular Meeting of the Carlsbad City Council on the 7th day of April, 2020, and thereafter

PASSED, APPROVED AND ADOPTED at a Regular Meeting of the City Council of the City of Carlsbad on the 21st day of April, 2020, by the following vote, to wit:

AYES: Hall, Blackburn, Bhat-Patel, Schumacher.

NAYS: None.

ABSENT: None.

APPROVED AS TO FORM AND LEGALITY:



CELIA A. BREWER, City Attorney



MATT HALL, Mayor



 BARBARA ENGLESON, City Clerk

(SEAL)

