

BEAC PUBLIC HEARING

LOCAL ADOPTION OF THE LATEST CALIFORNIA BUILDING STANDARDS CODE AND UNIFORM HOUSING CODE

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PREPARED BY



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TABLE OF CONTENT

CHAPTER/SECTION NUMBER	TITLE	PAGE
14.40	Temporary fencing and graphic screening	3
14.48	Encroachments into the public right-of-way	5
18.73	Flood resistant design and construction	8
18.03.020.B	Applications and permits	19
18.03.050.A	Code modification – general	20
18.05.030.A.7	Flood hazard documentations	22
18.06.010.A	Building permit fees	23
18.06.020.A	Buildings and structures plans examination fees	25
18.07.050.A	Inspection – building	27
18.40.010	Adoption	29
18.40.620	Amend CBC Section G101.3—Flood hazard scope	30
18.40.630	Amend CBC Section G101.4—Flood hazard violation	31
18.40.640	Add CBC Section G101.5—Flood hazard disclaimer of liability	32
18.40.650	Add CBC Section G101.6—Flood hazard designation of local	33
	administrator	
18.40.660	Amend CBC Section G102.1—Flood hazard general	34
18.40.670	Amend CBC Section G102.2—Flood hazard establishment	35
18.40.680	Add CBC Sections G102.3—Flood hazard interpretation of FIRM	36
	boundaries	
18.40.690	Amend CBC Sections G103.3—Flood hazard determination of design	37
	flood elevation	
18.40.700	Amend CBC Sections G103.5—Flood hazard floodway encroachment	38
18.40.710	Amend CBC Sections G103.6 and G103.6.1—Flood hazard watercourse	39
	alteration and engineering analysis	
18.40.720	Amend CBC Sections G103.7—Flood hazard alterations in coastal areas	40
18.40.730	Amend CBC Section G104.4—Flood hazard expiration	41
18.40.740	Amend CBC Section G105.1—Flood hazard general variance	42
18.40.750	Amend CBC Section G105.2—Flood hazard records	43
18.40.760	Amend CBC Section G105.7—Flood hazard conditions for issuance	44
18.40.770	Amend CBC Section G201.1—Flood hazard general definitions	45
18.40.580	Amend CBC Sections 202—Intermodal shipping containers	46
18.40.590	Amend CBC Section 3101.1—Intermodal shipping containers	47
18.40.600	Add CBC Section 3114—Intermodal shipping containers	48
18.40.610	Amend CBC Chapter 35—Intermodal shipping containers	56

Chapter 14.44 is added to Title 14 of the Long Beach Municipal Code to read as follows:

<u>CHAPTER 14.44</u> TEMPORARY FENCING AND GRAPHIC SCREENING

14.44.010 - Purpose.

The provisions of this chapter shall govern the erection of temporary fencing on public or private property during periods of construction impacting the public right-of-way. This chapter establishes parameters for such fencing.

14.44.020 - Definitions.

For the purpose of this chapter, unless the context clearly requires a different meaning, the words, terms and phrases set forth in this section are defined as follows:

"City" means the City of Long Beach, California, acting by and through the City Council.

"Development" means the division of a parcel of land into two (2) or more parcels; the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, landfill or land disturbance; or any use or extension of the use of land. This definition includes, but is not limited to subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the California Government Code); any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of the land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511 of the California Public Resources Code.)

"Graphics" is defined as visual images communicating a cohesive theme or concept.

"Person" means an individual, a receiver, a trustee, a co-partnership, a joint venture, a firm, an unincorporated association, a syndicate, a club, a society, a trust, a private corporation, a limited liability company, a public corporation, a municipal corporation, a County, a State, a national government, a municipal, County, State or federal agency, board or commission, a water district, a utility district, a political subdivision, a school district, a drainage, irrigation, levee, replenishment, reclamation or conservation district, and a flood control district, whether acting for himself/herself/itself or in any representative capacity.

"Structure" means any of the following, including but not limited to, building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, electrical power transmission, and distribution line.

"Temporary fencing" is defined as any fencing or barrier installed for demolition, construction, or other purposes to protect a development site or shield a development site from view.

14.44.030 - Permit required.

No person shall erect temporary fencing without first applying for and obtaining a permit from the City. The person requesting the permit shall submit all required items and pay all applicable permit fees. This includes:

- Plan drawings clearly identifying the perimeter fencing dimensions, location, and impacts to the abutting rights-of-way.
- 2. Public Works permit shall be obtained for the purpose of street use of right-of-way.
- Color renderings of the proposed graphics on a scaled drawing clearly identifying the location of each image.
- 4. Breakdown of the image area per the categories outlined in Section 14.44.040.

14.44.040 - Graphic screening.

All temporary fencing erected on public or private property shall be screened with graphics representative of the City and/or the development being screened in accordance with all of the following conditions:

- 1. 100% of the fenced area must contain graphics.
- 2. A minimum of 40% of the fenced area must contain City images.
- 3. Up to 35% of fenced area can contain project specific images.
- 4. Up to 25% of fenced area can contain advertising for the site such as but not limited to contact information for a broker, leasing agent, and/or opening dates.
- The total square footage of fenced area shall be calculated by multiplying the height of the fence by the length of perimeter fencing that requires graphic screening.

EXCEPTION: The following are exempt from the requirement of this section:

- A project that has a duration of less than six (6) months per the submitted and approved construction schedule.
- b. Graphic screening is not required on temporary fencing that is fronting or facing an alley or other areas not visible to the general public as determined by the City.

14.44.050 - Maintenance.

All fencing and graphics shall be maintained in good condition. Damaged, torn, or faded fencing or graphic screening shall be replaced within five (5) days.

RATIONALE:

The City intends to codify a policy that has been in place since 2017. Codifying the policy will ensure that implementation is consistent and clear direction is provided to the applicant.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed chapter formalizes a City policy and therefore needs to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the Long Beach Municipal Code.

Chapter 14.48 is added to Title 14 of the Long Beach Municipal Code to read as follows:

CHAPTER 14.48 ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY

14.48.010 - Purpose.

The provisions of this chapter shall govern the encroachment of structures or a portion of a building into the public right-of-way. This chapter establishes parameters for such encroachments not only at grade but also above and below grade.

14.48.020 - Definitions.

For the purpose of this chapter, unless the context clearly requires a different meaning, the words, terms and phrases set forth in this section are defined as follows:

"Applicant" means any person who applies for a permit under this chapter.

"City" means the City of Long Beach, California, acting by and through the City Council.

"Contractor" means a person who, for a fixed sum, price, fee percentage or compensation other than wages, undertakes or offers to undertake or purports to have the capacity to construct, alter, repair, add to, improve or install surface improvements to streets or any part thereof, or makes or commences to make any excavation in or under the surface of any right-of-way for the installation, repair, or removal of any pipe, conduit, duct or tunnel or any other construction purpose in the right-of-way.

"Development" means the division of a parcel of land into two (2) or more parcels; the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, landfill or land disturbance; or any use or extension of the use of land. This definition includes, but is not limited to subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code); any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of the land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511 of the California Public Resources Code.)

"Improvements" means the repair, modification, alteration, removal, or addition of facilities including, but not limited to, grading, paving, curbs, gutters, sidewalks, driveways, landscaping, street lighting, traffic signals, stairs, fences, walls, and any other work in the right-of-way.

"Installation and Maintenance Agreement" or "IMA" means the document required to formalize a binding agreement between an applicant and the City when work is being completed within the right-of-way that is not in compliance with or is outside of the City standards. The applicant is required to install and maintain the improvement for the duration of the agreement. This includes improvements such as artwork, decorative paving, or other objects. An improvement permit may not be issued until the IMA is executed.

"Permit" means the document issued to an applicant by the City under this chapter and includes any amendment or supplement to any such permit.

"Permittee" means any person to whom a permit has been granted and issued under the terms of this chapter.

"Person" means an individual, a receiver, a trustee, a co-partnership, a joint venture, a firm, an unincorporated association, a syndicate, a club, a society, a trust, a private corporation, a limited liability company, a public corporation, a municipal corporation, a County, a State, a national government, a municipal, County, State or federal agency, board or commission, a water district, a utility district, a political subdivision, a school district, a drainage, irrigation, levee, replenishment, reclamation or conservation district, and a flood control district, whether acting for himself/herself/itself or in any representative capacity.

"Right-of-way" means any easement or land owned by the City and used or designated for use as a street, parkway, alley, utility corridor, walkway, promenade, or bike path, and the surfaces thereof, and the airspace above such surfaces and the subsurface area below such surfaces and includes any right-of-way to be dedicated in the future.

"Structure" means any of the following, including but not limited to, building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, electrical power transmission, and distribution line.

14.48.030 - Encroachments below grade.

A portion of a building or structure erected below grade that is necessary for structural support of the building or structure shall not project beyond the lot line, except that the footings, shoring devices, or other similar supports as determined by the City shall not project more than twelve (12) inches beyond the lot line. Encroachments below grade may be subject to fees as outlined in Chapter 14.08.

14.48.040 - Encroachments above grade.

A. Encroachments into the public right-of-way above grade and below eight (8) feet in height are prohibited. This includes, but is not limited to, any doors, windows, gates and other moveable objects that can open, project or encroach into the public right-of-way. All existing encroachments into a street or alley must be remedied as part of a new development.

EXCEPTIONS: The following existing openings, projections or encroachments into a public right-of-way that cannot feasibly be modified as part of a new development may be permitted provided a warning device or other similar protection measure approved by the City is installed to minimize impact to the public. All improvements within the public right-of-way shall comply with City standards.

- 1. Existing fenestrations.
- 2. Existing steps, ramps, or architectural features that are in a sidewalk.
- B. Encroachments into the public right-of-way above eight (8) feet in height above a sidewalk are allowed for awnings, canopies, signs, architectural features, balconies, and windows. These improvements can encroach over the property line one (1) inch for each additional one (1) inch of clearance above eight (8) feet. The maximum encroachment shall be four (4) feet at a minimum clearance height of twelve (12) feet.
- C. Encroachments into the public right-of-way above seventeen (17) feet in height above a sidewalk or alley are allowed for pedestrian walkways and bridges. The maximum encroachment shall be four (4) feet unless they span the entire length of the public right-of-way to connect adjacent private parcels.
- D. Encroachments into the public right-of-way above seventeen (17) feet in height are allowed for lighting and other uses approved by the City.

14.48.050 - Permits required.

All encroachments into the public right-of-way shall applying for and obtaining a permit from the City. The person requesting the permit shall submit all required items and pay all applicable permit fees. This include plan drawings clearly identifying the encroachment and applicable dimensions with reference to the property line and public infrastructure within abutting public right-of-way.

RATIONALE:

The City has historically relied upon Chapter 32 of the California Building Code adopted in Chapter 18.40 to provide general guidance regarding encroachments into the public right-of-way. However, these requirements are subject to change with each triennial code adoption based upon the general consensus of code officials throughout the U.S. without regards to local consideration. These general standards do not reflect specific and unique requirements or standards that are appropriate for the City. Adding a new chapter in Title 14 provides consistency and uniformity and are vetted through the City's process.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment makes editorial changes to codify encroachments into the public right-of-way and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the Long Beach Municipal Code.

Chapter 18.73 of the Long Beach Municipal Code is deleted in its entirety as follows:

CHAPTER 18.73 FLOOD RESISTANT DESIGN AND CONSTRUCTION

18.73.010 - Findings of fact.

- The City of Long Beach finds:
 - A. The flood hazard areas of the City of Long Beach are subject to periodic inundation which results in loss of life and property; creation of 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 public health, safety and general welfare.
 - B. These flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from flood damage. The cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities also contribute to the flood loss.

18.73.020 - Statement of purpose.

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:

- A. To minimize expenditure of public money for costly flood control projects;
- B. To minimize the need for rescue and relief efforts associated with flooding, generally undertaken at the expense of the general public;
- C. To minimize prolonged business interruptions:
- D. To minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in areas of special flood hazard;
- E. To 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;
- F. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- G. To ensure that those who occupy special flood hazard areas assume responsibility for their actions.

18.73.030 - Methods of reducing flood losses.

- In order to accomplish its purposes, this chapter includes methods and provisions for:
 - A. Restricting and prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increase in erosion, flood heights or flood velocities;
 - B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction:
 - C. Controlling the alteration of natural flood plains, stream channels and natural protective barriers which help accommodate or channel flood waters;

- D. Controlling filling, dredging, grading, and other development which may increase flood damage;
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

18.73.040 - Definitions.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application. As used in this chapter, the words and phrases listed in this section shall have the meaning given them as follows:

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

"Area of shallow flooding" means a designated AO, AH, AR/AO or AR/AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one (1) to three (3) feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

"AR Zone" means a special flood hazard area that results from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide a level of flood protection equal to or greater than base flood.

"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.

"Developed areas" means an area of a community that is:

- A primarily urbanized, built-up area that is a minimum of twenty (20) contiguous acres, has basic urban infrastructure, including roads, utilities, communications, and public facilities, to sustain industrial, residential, and commercial activities, and
 - Within which seventy-five percent (75%) or more of the parcels, tracts, or lots contain commercial, industrial, or residential structures or uses; or
 - Is a single parcel, tract, or lot in which seventy-five percent (75%) of the area contains
 existing commercial or industrial structures or uses; or
 - c. Is a subdivision developed at a density of at least two (2) residential structures per acrewithin which seventy-five percent (75%) or more of the lots contain existing residential structures.
- Undeveloped parcels, tracts, or lots, the combination of which is less than twenty (20) acres and contiguous on at least three (3) sides to areas meeting the criteria of paragraph 1.
- A subdivision that is a minimum of twenty (20) contiguous acres that has obtained all necessary
 government approvals, provided that the actual "start of construction" of structures has
 occurred on at least:
 - a. Ten percent (10%) of the lots or remaining lots of a subdivision; or
 - b. Ten percent (10%) of the maximum building coverage or remaining building coverage allowed for a single lot subdivision and construction of structures is underway. Residential subdivisions must meet the density criteria in Subsection 18.73.040.N.1.c.

- "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.
- "Flood, flooding, or flood water" means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source.
- "Floodplain Administrator" is the individual appointed to administer and enforce the floodplain management regulations.
- "Floodplain management" means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.
- "Floodplain management regulations" means this chapter and other zoning ordinances, subdivision regulations, Building Codes, health regulations, special purpose ordinances (such as grading) and other applications of police power which control development in flood-prone areas. This term describes federal, State or local regulations in any combination thereof which provide standards for preventing and reducing flood loss and damage.
- "Floodway fringe" is that area of the floodplain on either side of the "Regulatory Floodway" where encroachment may be permitted.
- "Fraud and victimization" as related to Section 18.73.260 et seq. of this chapter means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the City Council will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for fifty (50) to one hundred (100) years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.
- "Functionally dependent use" means a use 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, and does not include long-term storage or related manufacturing facilities.
- "Governing body" is the City Council of the City of Long Beach that is empowered to adopt and implement regulations to provide for the public health, safety and general welfare of its citizenry.
- "Hardship" as related to Section 18.73.310 et seq. of this chapter means the exceptional hardship that would result from a failure to grant the requested variance. The City of Long Beach requires that the variance be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting 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.
- "Levee system" means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accord with sound engineering practices.

"Primary frontal dune" means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively mild slope. "Public safety and nuisance" as related to Section18.73.260 et seq. of this chapter 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.

"Regulatory floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

"Remedy a violation" means to bring the structure or other development into compliance with State or City 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 this chapter or otherwise deterring future similar violations, or reducing State or federal financial exposure with regard to the structure or other development.

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

"Sheet flow area" see "Area of shallow flooding".

"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.

"Violation" means the failure of a structure or other development to be fully compliant with this chapter. 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.

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

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

18.73.050 Lands to which this Ordinance applies.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the City of Long Beach.

18.73.060 - Basis for establishing the 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 a scientific and engineering report entitled "The Flood Insurance Study for the City of Long Beach", dated July 6, 1998, with accompanying Flood Insurance Rate Map (FIRMs), and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this chapter. This flood insurance study and attendant mapping is the minimum area of applicability of this chapter and may be supplemented by studies for other areas which allow implementation of this chapter and which are recommended to the City Council by the Floodplain Administrator. The Flood Insurance Study and FIRMs are on file in the office of the Department of Public Works, 333 West Ocean Boulevard, Long Beach, California 90802.

18.73.070 - 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. Violation of the requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeaner. Nothing herein shall prevent the City of Long Beach from taking such lawful action as is necessary to prevent or remedy any violations.

18.73.080 - Abrogations and greater restrictions.

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

18.73.090 - 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 government body; and
 - C. Deemed neither to limit nor repeal any other powers lawfully granted.

18.73.100 - 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 occasion. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the City of Long Beach, any officer or employee thereof, the State of California, the Federal Insurance Administration, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this chapter or any administrative decision made hereunder.

18.73.110 - Severability.

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

18.73.120 - Establishment of development permit.

A development permit shall be obtained before any construction or other development begins within any area of special flood hazard established in Section 18.73.060. Application for a development permit shall be made on forms furnished by the 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. Specifically, the following information is required:

- A. Proposed elevation in relation to base flood elevation, of the lowest floor, including basements, of all structures in Zone AO, elevation of highest adjacent grade and proposed elevation of lowest floor of all structures; or
- B. Proposed elevation in relation to base flood elevation to which any nonresidential structure will be floodproofed, if required; and

THE 2020 PROPOSED AMENDMENTS TO THE LONG BEACH MUNICIPAL CODE

- C. All appropriate certifications listed in Section 18.73.190; and
- D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

18.73.130 Designation of the local administrator.

The City Manager or his or her designated representative is hereby appointed Floodplain Administrator to administer and implement this chapter by granting or denying development permits in accordance with its provisions.

18.73.140 - Duties and responsibilities of the Floodplain Administrator.

The duties of the Floodplain Administrator shall include but not be limited to the duties set forth in Sections 18.73.150 through 18.73.210.

18.73.150 Permit review.

- The Floodplain Administrator shall:
 - A. Review all development permits to determine that the permit requirements of this chapter have been satisfied:
 - B. Review all development permits to determine that 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 (1) foot at any point;
 - Review proposed development to assure that all required State and federal permits have been obtained;
 - D. Review all development permits to determine that the site is reasonably safe from flooding.

18.73.160 - Use of other base flood data.

When base flood elevation data has not been provided in accordance with Section 18.73.060, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data available from a federal, State or other source, in order to administer Section 18.73.230. Any such information shall be submitted to the City Council for adoption.

18.73.170 - AR Zone duties of the Floodplain Administrator.

- The Floodplain Administrator shall:
 - A. Use the adopted official map or legal description of those designated developed areas within Zones AR, AR/A1-30, AR/AE, AR/AH, AR/A, AR/AO as defined in Section 18.73.040 to determine if a proposed project is in a developed area.
 - B. Determine the base flood elevation to be used for individual projects within the developed areas, areas not designated as developed areas, and dual zone areas (see Section 18.73.250).
 - C. Require the applicable standards in Section 18.73.230.

THE 2020 PROPOSED AMENDMENTS TO THE LONG BEACH MUNICIPAL CODE

D. Provide written notification to the permit applicant that the area has been designated as an AR, AR/A1-30, AR/AE, AR/AH, AR/AO, or AR/A Zone and whether the structure will be elevated or protected to or above the AR base flood elevation.

18.73.180 - Notification of other agencies.

- Where there is an alteration or relocation of a watercourse, the Floodplain Administrator shall:
 - A. Notify adjacent communities and the California Department of Water Resources prior to the alteration or relocation;
 - B. Submit evidence of such notification to the Federal Insurance Administration, Federal Emergency Management Agency; and
 - C. Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

18.73.190 Information to be obtained and maintained.

The Floodplain Administrator shall obtain and maintain for public inspection and shall make available as needed for flood insurance policies:

- A. Certification required by for lowest floor elevations;
- B. Certification required for elevation or floodproofing of nonresidential buildings or structures;
- C. Certification required for wet floodproofing standard;
- D. Certification of elevation for subdivision standards;
- E. Certification required for floodway encroachments;
- D. Information required for coastal construction standards; and
- E. Other information as required by the National Flood Insurance Program.

18.73.200 - Interpretation of FIRM boundaries.

The Floodplain Administrator shall make interpretations where needed as to the exact location of the boundaries of areas of special flood hazards, for example, where there appears to be a conflict between a mapped boundary and actual field conditions. The person contesting the boundaries shall be given a reasonable opportunity to appeal the interpretation as provided for in Sections 18.73.260, 18.73.270 and 18.73.280.

18.73.210 - Remedial action.

The Floodplain Administrator shall take action to remedy violations of this chapter as specified in Section 18.73.070.

18.73.220 Appeals.

The Board of Examiners, Appeals and Condemnation shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this chapter.

18.73.230 - Standards of construction.

- All new buildings, structures, and portions of buildings and structures, including substantial improvement and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads in accordance with Section 1612 of the California Building Code adopted in Chapter 18.40, Section R322 of the California Residential Code adopted in Chapter 18.41, and the ASCE 24. In addition, the following standards are required:
 - 1. For AR Zone requirements, see Section 18.73.250;
 - Residential construction, new or substantial improvement, shall have the lowest floor, including basement:

Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a register design professional licensed in the State of California to practice as such, and verified by the Building Official or a duly authorized representative to be properly elevated. Such certification or verification shall be provided to the Floodplain Administrator.

18.73.240 - Standards for subdivisions.

- A. All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.
- B. All final subdivision plans shall provide the elevation of proposed structures and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a register design professional licensed in the State of California to practice as such 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 facilities and utilities 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.

18.73.250 - Construction standards for AR Zone areas.

Within areas designated as AR, AR/A1-30, AR/AE, AR/AH, AR/AO, or AR/A, the following standards shall apply:

- A. Developed areas. All new construction in areas designated as developed areas shall meet the standards of Section 18.73.230 using the lower of either the AR base flood elevation or the elevation that is three (3) feet above the highest adjacent grade.
- B. Areas not designated as developed areas. All new construction in areas that are not designated as developed areas:
 - 1. Where the AR flood depth is equal to or less than five (5) feet above the highest adjacent grade, shall meet the standards of Section 18.73.230 using the lower of either the AR base flood elevation or the elevation that is three (3) feet above the highest adjacent grade.
 - Where the AR flood depth is greater than five (5) feet above the highest adjacent grade, shall
 meet the standards of Section 18.73.230 using the AR base flood elevation.

C. Dual zone areas.

1. All new construction in areas within zone AR/A1-30, AR/AE, AR/AH, AR/AO, AR/A shall meet the standards of Section 18.73.230 using the higher of either the applicable AR zone elevation

(as determined from Subsection 18.73.250.A or 18.73.250.B above) or the base flood elevation (or flood depth) for the underlying A1-30, AE, AH, AO, or A zone.

 All substantial improvements to existing construction within zones AR/A1-30, AR/AE, AR/AH, AR/AO, or AR/A shall meet the standards of Section 18.73.230 using the base flood elevation (or flood depth) for the underlying A1-30, AE, AH, AO, or A zone.

18.73.260 - Nature of variances.

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

It is the duty of the City to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level are so serious that variances from the flood elevation or from other requirements in this chapter are quite rare. 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 chapter 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.

18.73.270 - Variance procedure.

- A. The Floodplain Administrator shall hear and decide requests for variances from the requirements of this chapter.
- B. In passing upon requests for variances, the Floodplain Administrator 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 to life and property due to flooding;
 - The susceptibility of the proposed facility and its contents to flood damage and the 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 waterfront location, where applicable;
 - The availability of alternative locations for the proposed use which are not subject to flooding 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 times of flood for ordinary and emergency vehicles;
 - 40. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, 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.
- C. Any person aggrieved by the decision of the Floodplain Administrator may, within ten (10) days from the date the aggrieved party is notified in writing of the decision, appeal such decision to the City Council by filing a written notice thereof with the City Clerk. The City Council's decision shall be reduced to writing and shall be served by mail on the aggrieved party within ten (10) days after all evidence has been received by the City Council. The decision of the City Council shall be final.
- D. Generally, variances may be used for new construction and substantial improvements 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 Items 1 through 11 in Subsection 18.73.270.B and the procedures set forth in Sections 18.73.120 through 18.73.250 have been fully considered. As the lot size increases beyond one-half (1/2) acre, the technical justification required for issuing the variance increases.
- E. Upon consideration of the factors of Subsection 18.73.270.B and the purposes of this chapter, the Floodplain Administrator may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
- F. The Floodplain Administrator shall maintain the records of all variance actions, including justification for their issuance, and report any variances issued in its biennial report submitted to the Federal Insurance Administration, Federal Emergency Management Agency.
- G. Any applicant to whom a variance is granted shall be given written notice over the signature of the Floodplain Administrator that:
 - 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 (\$25.00) for one hundred dollars (\$100.00) of insurance coverage, and
 - Such construction below the base flood level increases risks to life and property. A copy of the
 notice shall be recorded by the Floodplain Administrator in the Office of the Los Angeles County
 Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected
 parcel of land.

18.73.280 - Conditions for variances.

- A. Variances may be issued for the repair or rehabilitation of "historic structures" (as defined in Section 18.73.040) 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.
- B. Variances shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.
- C. 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 minimum of deviation from the requirements of this chapter. For example, in the case of variances to an elevation requirement, this means the City Council need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which the City Council believes will provide relief and preserve the integrity of this chapter.
- D. Variances shall only be issued upon:
 - 1. A showing of good and sufficient cause;

- A determination that failure to grant the variance would result in exceptional hardship (as defined in Section 18.73.040) to the applicant; and
- 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances (as defined in Section 18.73.040 see "Public safety and nuisance"), cause fraud on or victimization (see Section 18.73.040) of the public, or conflict with existing local laws or ordinances.
- E. 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 Subsections 18.73.280.A through 18.73.280.D 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.
- F. Upon consideration of the factors of Section 18.73.270 and the purposes of this chapter, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Since 1998, the City has had its own flood regulation promulgated by FEMA. As FEMA over the last few code adoption cycles are incorporating more current and up to date flood regulations as part of the International Codes, which are adopted by the California Building Standards Commission, it is appropriate for the City to utilize those standards in lieu of existing and out of date flood regulation adopted in 1998. This will ensure consistency and ensure that the City is utilized the most current regulations in line with FEMA requirements to protect and safeguard the community from flood related hazards. The deletion of the Chapter 18.73 will be replaced with the adoption of Appendix G of the latest edition of the California Building Code.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Subsection 18.03.020.B of the Long Beach Municipal Code is amended to read as follows:

B. Applications and permits. The Building Official shall receive applications, examine construction documents and issue permits for the erection, addition, alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this title, municipal code or other ordinances of the City or laws and statutes of the State.

For applications for reconstruction, rehabilitation, repair, alteration, addition and other improvement of existing buildings or structures located in flood hazard areas, the Building Official shall determine if the proposed work constitutes substantial improvements or repair of substantial damage. Where the Building Official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this title, municipal code or other ordinances of the City or laws and statutes of the State, the Building Official shall require the building to meet the requirements of Section 1612 and Appendix G of the California Building Code adopted in Chapter 18.40 or Section R322 of the California Residential Code adopted in Chapter 18.41.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Subsection 18.03.050.A of the Long Beach Municipal Code is amended to read as follows:

A. General. Whenever there are practical difficulties involved in carrying out the provisions of this title, the Building Official shall have the authority to grant modifications for individual cases, upon the application of the owner or owner's <u>authroized authorized</u> agent, provided the Building Official shall first find that special individual reason makes the strict letter of this title impractical and the modification is in compliance with the intent and purpose of this title and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the Building and Safety Bureau. A written application shall be submitted together with a fee set forth in Section 18.06.160.

The Building Official shall not grant modifications to any provisions required in flood hazard areas as established in Section 1612.3 and Appendix G of the California Building Code adopted in Chapter 18.40 or Section R322 of the California Residential Code adopted in Chapter 18.41 unless a determination has been made that:

- A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 and Appendix G of the California Building Code adopted in Chapter 18.40 or Section R322 of the California Residential Code adopted in Chapter 18.41 inappropriate.
- A determination that failure to grant the modification would result in exceptional hardship by rendering the lot undevelopable.
- A determination that the granting of a modification will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws and ordinances.
- A determination that the modification is the minimum necessary to afford relief, considering the flood hazard.
- 5. Submission to the applicant of written notice specifying the difference between the design flood elevation and elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that the construction below the design flood elevation increases risks to life and property.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to

Department of Development Services: Building and Safety Bureau | Planning Bureau | Code Enforcement Bureau Page 20 of 57 Fire Department: Fire Prevention Bureau Draft Version: 09/09/2019 Department of Public Works

existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.		
California Bulluling Code, California Residential Code, and Long Beach Municipal Code.		

Subsection 18.05.030.A.7 of the Long Beach Municipal Code is amended to read as follows:

7. For buildings located in whole or in part in flood hazard areas as established in Chapter 16 and Appendix G of the California Building Code adopted in Chapter 18.40, or Chapter 3 of the California Residential Code adopted in Chapter 18.41, or Chapter 18.73, the construction documents shall include flood hazard documentations and design flood elevation information as required by provisions of this title, municipal code or other ordinances of the City or laws and statutes of the State.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Subsection 18.06.010.A of the Long Beach Municipal Code is amended to read as follows:

A. Building permit fees. A building permit (exclusive of subtrade permits) shall be issued for each building or structure to be erected or upon which work is to be done thereunder when required pursuant to Section 18.04.010 and for each such permit the permit applicant shall pay a permit filing fee as set forth in the schedule of fees and charges established by City Council resolution plus a fee computed on the basis of the estimated total cost of the work proposed to be done, in accordance with the building permit fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Chapter 18.61 NPDES and SUSMP Regulations shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Chapter 18.73 Flood Resistant Design and ConstructionTitle 24, Parts 2 and 2.5, of the California Code of Regulations, the State's Building and Residential Codes for flood resistant design and construction regulation, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Chapter 18.74 Low Impact Development Standards shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Sections 1.8.2.1.2 and 1.9.1 of Title 24, Part 2, of the California Code of Regulations, the State's Disabled Access and Adaptability Requirements, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Title 24, Part 6, of the California Code of Regulations, the State's Building Energy Efficiency Standards Code as developed by the California Energy Commission, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Chapter 1 of Title 24, Part 11, of the California Code of Regulations, the State's Green Building Standards Code, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Section 2700, Chapter 8, Division 2 of the California Public Resources Code, the State's Strong Motion Instrumentation Program, shall pay an additional fee as set forth in Section 2705, Chapter 8, Division 2 of the California Public Resources Code.

In addition to the above, projects regulated under Article 1-10 in Chapter 1 of Title 24, Part 1, of the California Code of Regulations, the State's Building Standards Administration Special Revolving Fund, shall pay an additional fee as set forth in Section 18931.6 of the California Health and Safety Code.

EXCEPTION: A single combined permit may be issued for the following:

- The construction, addition or alteration of any building or structure of a one- or two-family dwelling and related accessory building and structure, which includes all building, electrical, plumbing, heating, ventilating, and air conditioning work; or
- The construction, addition or alteration of any sign or sign support structure, which includes all building and electrical work.

The total permit fee for the combined building permit shall be as set forth in the schedule of fees and charges established by City Council resolution.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Subsection 18.06.020.A of the Long Beach Municipal Code is amended to read as follows:

A. Buildings and structures plans examination fees. Except as provided in this section, the permit applicant for a building permit shall, in addition to the fee prescribed therefore and at the time of making application for such building permit, pay a plans examination fee as set forth in the schedule of fees and charges established by City Council resolution, including the filing fee. The plans examination fee for a combined permit shall be as set forth in the schedule of fees and charges established by City Council resolution for a building permit of the same valuation.

In addition to the above, projects regulated under Chapter 18.61 NPDES and SUSMP Regulations shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Chapter 18.73 Flood Resistant Design and ConstructionTitle 24, Parts 2 and 2.5, of the California Code of Regulations, the State's Building and Residential Codes for flood resistant design and construction regulation, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Chapter 18.74 Low Impact Development Standards shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Sections 1.8.2.1.2 and 1.9.1 of Title 24, Part 2, of the California Code of Regulations, the State's Disabled Access and Adaptability Requirements, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Title 24, Part 6, of the California Code of Regulations, the State's Building Energy Efficiency Standards Code as developed by the California Energy Commission, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

In addition to the above, projects regulated under Chapter 1 of Title 24, Part 11, of the California Code of Regulations, the State's Green Building Standards Code, shall pay an additional fee as set forth in the schedule of fees and charges established by City Council resolution.

EXCEPTIONS: No plans examination fee shall be required when the Building Official has determined that the submittal of construction documents and other data are not required if it is found that the nature of the work applied for is such that the examination of construction documents is not necessary to obtain compliance with this title.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7

Department of Development Services: Building and Safety Bureau | Planning Bureau | Code Enforcement Bureau Page 25 of 57 Fire Department: Fire Prevention Bureau Draft Version: 09/09/2019 Department of Public Works

THE 2020 PROPOSED AMENDMENTS TO THE LONG BEACH MUNICIPAL CODE

of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Subsection 18.07.050.A of the Long Beach Municipal Code is amended to read as follows:

- A. Building. The Building Official, upon notification as specified in Section 18.07.030, shall make the inspections set forth in subsection, if applicable.
 - Footing and foundation inspection. Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C94, the concrete need not be on the job.
 - Concrete slab and under-floor inspection. Concrete slab and under-floor inspections shall be made after all in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.
 - 3. Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in Chapter 18.73 Flood Resistant Design and Construction or Chapter 16 and Appendix G of the California Building Code adopted in Chapter 18.40, or Chapter 3 of the California Residential Code adopted in Chapter 18.41 shall be submitted to the Building Official. A final elevation certification shall be submitted to the Building Official prior to making a request for final inspection.
 - 4. Frame inspection. Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and all pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.
 - 5. Lath, gypsum board and gypsum panel product inspection. Lath, gypsum board and gypsum panel product inspections shall be made after lathing, gypsum board and gypsum panel products, interior and exterior, are in place, but before any plastering is applied or gypsum board and gypsum panel product joints and fasteners are taped and finished.
 - Fire- and smoke-resistant penetrations. Protection of joints and penetrations in fire resistancerated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.
 - 7. Energy efficiency inspections. Inspections shall be made to determine compliance with the California Energy Code adopted in Chapter 18.46 and shall include, but not be limited to, inspection for: envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency.
 - 8. Reinforced concrete. When forms and reinforcing steel are in place ready for concrete.
 - Reinforced masonry. In grouted masonry when vertical reinforcing steel is in place and other reinforcing steel distributed and ready for placing, but before any units are laid up.
 - 10. Structural steel. When structural steel members are in place and required connections are complete, but before concealing any members or connection.
 - 11. Other inspections. In addition to the inspections specified in this subsection, the Building Official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this title and other laws that are enforced by the Building Official

- 12. Special inspections. When special inspections are required by Chapter 17 of the California Building Code adopted in Chapter 18.40.
- 13. Final inspection. Final inspection shall be made after all work required by the permit is completed and prior to occupancy. If located in a flood hazard area, flood hazard documentation required in Chapter 16 and Appendix G of the California Building Code adopted in Chapter 18.40, or Chapter 3 of the California Residential Code adopted in Chapter 18.41 shall be submitted to the Building Official prior to final inspection.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.010 of the Long Beach Municipal Code is amended to read as follows:

18.40.010 - Adoption.

The City Council adopts and incorporates by reference as though set forth in full in this chapter the 20162019 Edition of the California Building Code (herein referred to as the "California Building Code"). The California Building Code is Part 2 of the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part is based on the provisions of the 20152018 Edition of the International Building Code (herein referred to as the "International Building Code") as developed by the International Code Council with necessary California amendments. The following appendices of the California Building Code are included: Appendices C. G. and I. and J. The following sections, chapters or appendices of the California Building Code are deleted: Sections 101 through 116 of Chapter 1, Division II; Section 3113 of Chapter 31, and Section 3308 of Chapter 33; Chapters 27, 28, 29, 31A, 31C, 31D, 31E, 31F, 32, and 34; and Appendices A, B, D, E, F, G, H, J, K, L, and M, N, and O.

The adoption of the California Building Code is subject to the changes, amendments and modifications to said code as provided in this chapter, and certain provisions of the Long Beach Municipal Code, which shall remain in full force and effect as provided in this title. Such codes and code provisions shall constitute and be known as the Long Beach Building Code. A copy of the California Building Code, printed as code in book form, shall be on file in the Office of the City Clerk.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. This proposed amendment is a continuation of an amendment adopted during previous code adoption cycles. This proposed amendment makes administrative changes to reflect that certain non-mandatory sections, chapters, and/or appendices are either included or deleted as part of the code adoption.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code.

Section 18.40.620 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.620 - Amend CBC Section G101.3-Flood hazard scope.

Section G101.3 of the 2019 Edition of the California Building Code is amended to read as follows:

G101.3 Scope. The provision of this appendix shall apply to all proposed development in a flood hazard area established in Section 1612 of this code, including certain building work exempt from permit under Section 18.04.020 of the Long Beach Municipal Code.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference the LBMC in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.630 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.630 - Amend CBC Section G101.4—Flood hazard violation.

Section G101.4 of the 2019 Edition of the California Building Code is amended to read as follows:

G101.4 Violations. Any violation of a provision of this appendix, or failure to comply with a permit or variance issued pursuant to this appendix or any requirement of this appendix, shall be handled in accordance with Chapter 18.09 of the Long Beach Municipal Code.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference the LBMC in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.640 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.640 - Add CBC Section G101.5—Flood hazard disclaimer of liability.

Section G101.5 is added to the 2019 Edition of the California Building Code to read as follows:

G101.5 Warning and disclaimer of liability. The degree of flood protection required by this appendix is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on occasion. Flood heights may be increased by manmade or natural causes. This appendix does not imply that land outside areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This appendix shall not create liability on the part of the City of Long Beach, any officer or employee thereof, the State of California, the Federal Insurance Administration, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this appendix or any administrative decision made hereunder.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.650 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.650 - Add CBC Section G101.6—Flood hazard designation of local administrator.

Section G101.6 is added to the 2019 Edition of the California Building Code to read as follows:

G101.6 Designation of local administrator. The Building Official and City Engineer are hereby designated to administer and implement this appendix by granting or denying permits in accordance with its provisions and the Long Beach Municipal Code.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the Building Official and City Engineer as Floodplain Administrators for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.660 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.660 - Amend CBC Section G102.1—Flood hazard general.

Item 10 of Section G102.1 of the 2019 Edition of the California Building Code is amended to read as follows:

10. Certain building work exempt from permit under Section 18.04.020 of the Long Beach Municipal Code and other buildings and development activities.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference the LBMC in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.670 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.670 - Amend CBC Section G102.2—Flood hazard establishment.

Section G102.2 of the 2019 Edition of the California Building Code is amended to read as follows:

G102.2 Establishment of flood hazard areas. Flood hazard areas are established in Section 1612.3 of this code and by the Federal Insurance Administration of the Federal Emergency Management Agency (FEMA), in a scientific and engineering report entitled "The Flood Insurance Study for the City of Long Beach", dated July 6, 1998, with accompanying Flood Insurance Rate Map (FIRMs), and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this appendix. This flood insurance study and attendant mapping is the minimum area of applicability of this appendix and may be supplemented by studies for other areas which allow implementation of this appendix and which are recommended to the City Council by the City Engineer. The Flood Insurance Study and FIRMs are on file in the office of the Department of Public Works, 411 West Ocean Boulevard, Long Beach, California 90802.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.680 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.680 - Add CBC Sections G102.3—Flood hazard interpretation of FIRM boundaries.

Section G102.3 is added to the 2019 Edition of the California Building Code to read as follows:

G102.3 Interpretation of FIRM boundaries. The City Engineer shall make interpretations where needed as to the exact location of the boundaries of flood hazard areas where there appears to be a conflict between a mapped boundary and actual field conditions. The applicant contesting the boundaries shall be given a reasonable opportunity to appeal the interpretation as provided for in Section G105.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the City Engineer as Floodplain Administrator for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.690 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.690 - Amend CBC Sections G103.3—Flood hazard determination of design flood elevation.

Item 2 of Sections G103.3 of the 2019 Edition of the California Building Code is amended to read as follows:

2. Determine the design flood elevation in accordance with accepted hydrologic and hydraulic engineering techniques. Such analyses shall be performed and sealed by a registered design professional. Studies, analyses, and computations shall be submitted in sufficient detail to allow review and approval by the City Engineer. The accuracy of data submitted for such determination shall be the responsibility of the applicant.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the City Engineer as Floodplain Administrator for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.700 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.700 - Amend CBC Sections G103.5-Flood hazard floodway encroachment.

Sections G103.5 of the 2019 Edition of the California Building Code is amended to read as follows:

G103.5 Floodway encroachment. Prior to issuing a permit for any floodway encroachment, including fill, new construction, substantial improvements and other development or land-disturbing activity, the City Engineer shall require submission of a certification, prepared by a registered design professional, along with supporting technical data, demonstrating that such development will not cause any increase of the base flood level.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the City Engineer as Floodplain Administrator for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.710 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.710 - Amend CBC Sections G103.6 and G103.6.1—Flood hazard watercourse alteration and engineering analysis.

Sections G103.6 and G103.6.1 of the 2019 Edition of the California Building Code are amended to read as follows:

G103.6 Watercourse alteration. Prior to issuing of a permit for any alteration or relocation of any watercourse, the City Engineer shall provide notification of the proposal to the appropriate authorities of all adjacent government jurisdictions, as well as the California Department of Water Resources. A copy of the notification shall be maintained in the permit records and submitted to FEMA.

G103.6.1 Engineering analysis. The City Engineer shall require submission of an engineering analysis, prepared by a registered design professional, demonstrating that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased. Such watercourses shall be maintained in a manner that preserves the channel's flood-carrying capacity.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the City Engineer as Floodplain Administrator for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.720 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.720 - Amend CBC Sections G103.7-Flood hazard alterations in coastal areas.

Sections G103.7 of the 2019 Edition of the California Building Code are amended to read as follows:

G103.7 Alterations in coastal areas. Prior to issuing a permit for any alteration of sand dunes and mangrove stands in coast high-hazard areas and coastal A zones, the City Engineer shall require submission of an engineering analysis, prepared by a registered design professional, demonstrating that the proposed alteration will not increase the potential for flood damage.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the City Engineer as Floodplain Administrator for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.730 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40. 730 - Amend CBC Section G104.4—Flood hazard expiration.

Section G104.4 of the 2019 Edition of the California Building Code is amended to read as follows:

G104.4 Expiration. Section 18.04.060 of the Long Beach Municipal Code shall govern when a permit become invalid or expired.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference the LBMC in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.740 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.740 – Amend CBC Section G105.1—Flood hazard general variance.

Section G105.1 of the 2019 Edition of the California Building Code is amended to read as follows:

G105.1 General. The Board of Examiners, Appeals and Condemnation (hereinafter referred to as "board of appeals" in this appendix) established pursuant to Chapter 18.10 of the Long Beach Municipal Code shall hear and decide requests for variances. The board of appeals shall base its determination on technical justifications and has the right to attach such conditions to variances as it deems necessary to further the purposes and objectives of this appendix and Section 1612.

Any person aggrieved by the decision of the board of appeal may, within ten (10) days from the date the aggrieved party is notified in writing of the decision, appeal such decision to the City Council by filing a written notice thereof with the City Clerk. The City Council's decision shall be reduced to writing and shall be served by mail on the aggrieved party within ten (10) days after all evidence has been received by the City Council. Upon consideration of the factors of Section G105.6 and the purposes of this appendix, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this appendix. The decision of the City Council shall be final.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference the LBMC in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.750 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.750 - Amend CBC Section G105.2—Flood hazard records.

Section G105.2 of the 2019 Edition of the California Building Code is amended to read as follows:

G105.2 Records. The Building Official shall maintain a permanent record of all variance actions, including justification for their issuance. The City Engineer shall report any variances issued in its report submitted to FEMA.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the Building Official and City Engineer as Floodplain Administrators for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.760 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.760 - Amend CBC Section G105.7—Flood hazard conditions for issuance.

<u>Item 5 of Section G105.7 of the 2019 Edition of the California Building Code is amended to read as follows:</u>

5. Notification to the applicant in writing over the signature of the Building Official that 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 that such construction below the base flood level increases risks to life and property. Prior to the issuance of a permit, a copy of the notice shall be recorded by the applicant in the Office of the Los Angeles County Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference and relocate previously adopted LBMC language in Chapter 18.73 in lieu of the State's model code language. This change also clarifies the role of the Building Official as Floodplain Administrator for the City.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.770 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.770 - Amend CBC Section G201.1—Flood hazard general definitions.

Section G201.1 of the 2019 Edition of the California Building Code is amended to read as follows:

G201.1 General. The following words and terms shall, for the purpose of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code or Chapter 18.02 of the Long Beach Municipal Code for general definitions.

RATIONALE:

Administrative changes to reference the latest edition of the State's code. State law requires that local jurisdictions adopt the 2019 Edition of the California Building Code by January 1, 2020. Administrative change to update reference to the State's flood resistant design and construction requirement in lieu of the City's flood regulation contained in Chapter 18.73, which will be deleted in favor of the State's regulation.

Administration change to reference the LBMC in lieu of the State's model code language.

FINDINGS:

Local Administrative Clarification – Amendment is necessary for local administrative clarification, does not modify a Building Standards as defined in Section 18909(c) of the California Health and Safety Code, and does not require the express findings and determination required by Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code. The proposed amendment clarifies that any new construction and substantially improvement or repair of substantial damage buildings or structures in flood hazard areas are subject to the requirement of Section 1612 and Appendix G or Section R322 and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code, California Residential Code, and Long Beach Municipal Code.

Section 18.40.580 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.580 - Amend CBC Sections 202—Intermodal shipping containers.

Section 202 of the 2019 Edition of the California Building Code is amended to add a new definition for "Intermodal Shipping Container" as follows:

INTERMODAL SHIPPING CONTAINER. A six-sided steel unit originally constructed as a general cargo container used for the transport of goods and materials.

RATIONALE:

Due to the US trade deficit with other countries, there is an abundant supply of unused intermodal shipping containers, particularly since the City has a shipping port, that have created negative impacts on the environment. This results in more materials that are not recycled and increases energy consumption required to melt down and recycle others that are. The repurposing of existing intermodal shipping containers will help to reduce the environmental impact and improve the sustainability of the community by being less reliant on traditional construction material.

This proposed amendment is based on a similar code provision adopted into the 2021 Edition of the International Building Code. It is intended to assist code officials address the environmental impact of unused materials, reduce consumption of traditional raw materials, minimize non-industrial wastes, and ensure minimum design and safety standards associated with the repurposing of existing intermodal shipping containers as buildings or structures or component of buildings and structures are achieved.

In May 2017, the City Council adopted 29 recommendations to support the production and preservation of affordable and workforce housing. This proposed amendment is in response to *Recommendation 3.10: Encourage the adoption of regulations to allow and incentivize the use of shipping container construction for housing.* The Department engaged in, and worked with, local, State and national agencies and organizations to shape the regulations and code, to facilitate, and thus, incentivize, the use of shipping containers in accordance with Item 3.10.

FINDINGS:

Local Geologic and Climatic Conditions – Amendment is necessary on the basis of a local geologic and climatic condition. The City of Long Beach is a densely populated city having buildings and structures constructed over or near a vast array of fault traces resulting from the active Newport-Inglewood fault system that is capable of producing a major earthquake and within a climate system capable of producing major winds, fire and rain related disasters, including but not limited to those caused by the Santa Ana winds and El Nino (or La Nina) subtropical-like weather. The City is further impacted by construction of buildings and structures utilizing tradition construction materials that impact the amount of energy, air quality, greenhouse gas emission and construction waste in the area. The proposed amendment to address structural designs specific to intermodal shipping containers, reduce environmental impact of unused and unrecycled intermodal shipping containers, and increase sustainability by reducing consumption of traditional construction materials are intended to better limit personal injury and property damage as a result of geologic and climatic activity and therefore need to be incorporated into the code to assure that new buildings and structures are designed and constructed in accordance with the scope and objectives of the California Building Code.

Section 18.40.590 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.590 - Amend CBC Section 3101.1—Intermodal shipping containers.

Section 3101.1 of the 2019 Edition of the California Building Code is amended to read as follows:

3101.1 Scope. The provisions of this chapter shall govern special building construction including membrane structures, temporary structures, pedestrian walkways and tunnels, automatic vehicular gates, awnings and canopies, marquees, signs, towers, antennas, relocatable buildings, swimming pool enclosures and safety devices, solar energy systems, and intermodal shipping containers.

RATIONALE:

Due to the US trade deficit with other countries, there is an abundant supply of unused intermodal shipping containers, particularly since the City has a shipping port, that have created negative impacts on the environment. This results in more materials that are not recycled and increases energy consumption required to melt down and recycle others that are. The repurposing of existing intermodal shipping containers will help to reduce the environmental impact and improve the sustainability of the community by being less reliant on traditional construction material.

This proposed amendment is based on a similar code provision adopted into the 2021 Edition of the International Building Code. It is intended to assist code officials address the environmental impact of unused materials, reduce consumption of traditional raw materials, minimize non-industrial wastes, and ensure minimum design and safety standards associated with the repurposing of existing intermodal shipping containers as buildings or structures or component of buildings and structures are achieved.

In May 2017, the City Council adopted 29 recommendations to support the production and preservation of affordable and workforce housing. This proposed amendment is in response to *Recommendation 3.10: Encourage the adoption of regulations to allow and incentivize the use of shipping container construction for housing.* The Department engaged in, and worked with, local, State and national agencies and organizations to shape the regulations and code, to facilitate, and thus, incentivize, the use of shipping containers in accordance with Item 3.10.

FINDINGS:

Local Geologic and Climatic Conditions – Amendment is necessary on the basis of a local geologic and climatic condition. The City of Long Beach is a densely populated city having buildings and structures constructed over or near a vast array of fault traces resulting from the active Newport-Inglewood fault system that is capable of producing a major earthquake and within a climate system capable of producing major winds, fire and rain related disasters, including but not limited to those caused by the Santa Ana winds and El Nino (or La Nina) subtropical-like weather. The City is further impacted by construction of buildings and structures utilizing tradition construction materials that impact the amount of energy, air quality, greenhouse gas emission and construction waste in the area. The proposed amendment to address structural designs specific to intermodal shipping containers, reduce environmental impact of unused and unrecycled intermodal shipping containers, and increase sustainability by reducing consumption of traditional construction materials are intended to better limit personal injury and property damage as a result of geologic and climatic activity and therefore need to be incorporated into the code to assure that new buildings and structures and additions or alterations to existing buildings or structures are designed and constructed in accordance with the scope and objectives of the California Building Code.

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Section 18.40.600 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.600 - Add CBC Section 3114—Intermodal shipping containers.

Section 3114 is added to the 2019 Edition of the California Building Code to read as follows:

SECTION 3114 INTERMODAL SHIPPING CONTAINERS

3114.1 General. The provisions of Section 3114 and other applicable sections of this code shall apply to intermodal shipping containers that are repurposed for use as buildings or structures or as a part of buildings or structures.

Exceptions:

- Stationary storage battery arrays located in intermodal shipping containers complying with Chapter 12 of the California Fire Code.
- Intermodal shipping containers that are listed as equipment complying with the standard for equipment, such as air chillers, engine generators, modular datacenters, and other similar equipment.
- 3. Intermodal shipping containers housing or supporting experimental equipment are exempt from the requirements of Section 3114 provided they comply with all of the following:
 - 3.1. Single-unit stand-alone intermodal shipping containers shall be supported at grade level and used only for occupancies as specified under Risk Category I in Table 1604.5;
 - 3.2. Single-unit stand-alone intermodal shipping containers shall be located a minimum of 8 feet from adjacent structures and are not connected to a fuel gas system or fuel gas utility: and
 - 3.3. In hurricane-prone regions and flood hazard areas, single-unit stand-alone intermodal shipping containers are designed in accordance with the applicable provisions of Chapter 16.
- Intermodal shipping containers approved as temporary structures complying with Section 3103.
- 5. Single-unit stand-alone intermodal shipping containers used as temporary storage or construction trailer on active construction sites. Construction support facilities for uses and activities not directly associated with the actual processes of construction, including but not limited to, offices, meeting rooms, plan rooms, other administrative or support functions shall not be exempt from Section 3114.
- 3114.2 Construction documents. The construction documents shall contain information to verify the dimensions and establish the physical properties of the steel components, and wood floor components, of the intermodal shipping container in addition to the information required by Sections 107 and 1603.
- 3114.3 Intermodal shipping container information. Intermodal shipping containers shall bear the manufacturer's existing data plate containing the following information as required by ISO 6346 and verified by an approved agency. A report of the verification process and findings shall be provided to the building owner.

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- Manufacturer's name or identification number
- 2. Date manufactured
- 3. Safety approval number
- 4. Identification number
- 5. Maximum operating gross mass or weight (kg) (lbs)
- 6. Allowable stacking load for 1.8G (kg) (lbs)
- 7. Transverse racking test force (Newtons)
- 8. Valid maintenance examination date

Where approved by the building official, the markings and manufacturer's existing data plate are experimented to be removed from the intermodal shipping containers before they are repurposed for use as buildings or structures or as part of buildings or structures.

3114.4 Protection against decay and termites. Wood structural floors of intermodal shipping containers shall be protected from decay and termites in accordance with the applicable provisions of Section 2304.12.1.1.

3114.5 Under-floor ventilation. The space between the bottom of the floor joists and the earth under any intermodal shipping container, except spaces occupied by basements and cellars, shall be provided with ventilation in accordance with Section 1202.4.

3114.6 Roof assemblies. Intermodal shipping container roof assemblies shall comply with the applicable requirements of Chapter 15.

Exception: Single-unit stand-alone intermodal shipping containers not attached to, or stacked vertically over, other intermodal shipping containers, buildings or structures.

3114.7 Joints and voids. Joints and voids that create concealed spaces between intermodal shipping containers, that are connected or stacked, at fire-resistance-rated walls, floor or floor/ceiling assemblies and roofs or roof/ceiling assemblies shall be protected by an approved fire-resistant joint system in accordance with Section 715.

3114.8 Structural. Intermodal shipping containers that conform to ISO 1496-1 and are repurposed for use as buildings or structures, or as a part of buildings or structures, shall be designed in accordance with Chapter 16 and this section.

3114.8.1 Foundations. Intermodal shipping containers repurposed for use as a permanent building or structure shall be supported on foundations or other supporting structures designed and constructed in accordance with Chapters 16 through 23.

3114.8.1.1 Anchorage. Intermodal shipping containers shall be anchored to foundations or other supporting structures as necessary to provide a continuous load path for all applicable design and environmental loads in accordance with Chapter 16.

3114.8.2 Welds. All new welds and connections shall be equal to or greater than the original connections.

3114.8.3 Openings in containers. Where openings are made in container walls, floors, and roofs for doors, windows and other similar openings:

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 The openings shall be framed with steel elements that are designed in accordance with Chapter 16 and Chapter 22.

2. The cross section and material grade of any new steel element shall be equal to or greater than the steel element removed.

3114.8.4 Detailed structural design procedure. A structural analysis meeting the requirements of this section shall be provided to the building official to demonstrate the structural adequacy of the intermodal shipping containers.

Exception: Intermodal shipping containers that meet the limitation of Section 3114.8.5.1 and designed in accordance with the simplified procedure in Section 3114.8.5.

3114.8.4.1 Material properties. Structural material properties for existing intermodal shipping container steel components shall be established by material testing where the steel grade and composition cannot be identified by the manufacturer's designation as to manufacture and mill test.

3114.8.4.2 Seismic design parameters. The seismic force-resisting system shall be designed and detailed in accordance with one of the following:

- Where all or portions of the intermodal shipping container sides are considered to be the seismic force-resisting system, design and detailing shall be in accordance with the ASCE 7 Table 12.2-1 requirements for light-frame bearing-wall systems with shear panels of all other materials,
- Where portions of intermodal shipping container sides are retained, but are not considered to be the seismic force-resisting system, an independent seismic force-resisting system shall be selected, designed and detailed in accordance with ASCE 7
 Table 12.2-1, or
- 3. Where portions of the intermodal shipping container sides are retained and integrated into a seismic force-resisting system other than as permitted by Section 3114.8.4.2 Item 1, seismic design parameters shall be developed from testing and analysis in accordance with Section 104.11 and ASCE 7 Section 12.2.1.1 or 12.2.1.2.

3114.8.4.3 Allowable shear value. The allowable shear values for the intermodal shipping container side walls and end walls shall be demonstrated by testing and analysis accordance with Section 104.11. Where penetrations are made in the side walls or end walls designated as part of the lateral force-resisting system, the penetrations shall be substantiated by rational analysis.

3114.8.5 Simplified structural design procedure of single-unit containers. Single-unit intermodal-shipping containers conforming to the limitations of Section 3114.8.5.1 shall be permitted to be designed in accordance with Sections 3114.8.5.2 and 3114.8.5.3.

 $\underline{\textbf{3114.8.5.1 Limitations. Use of Section 3114.8.5 is subject to all the following limitations:}\\$

- The intermodal shipping container shall be a single stand-alone unit supported on a
 foundation and shall not be in contact with or supporting any other shipping container
 or other structure.
- The intermodal shipping container's top and bottom rails, corner castings, and columns or any portion thereof shall not be notched, cut, or removed in any manner.

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3. The intermodal shipping container shall be erected in a level and horizontal position with the floor located at the bottom.

3114.8.5.2 Structural design. Where permitted by Section 3114.8.5.1, single-unit stand-alone intermodal shipping containers shall be designed using the following assumptions for the side walls and end walls:

- 1. The appropriate detailing requirements contained in Chapters 16 through 23.
- 2. Response modification coefficient, R = 2,
- 3. Over strength factor, $\Omega_0 = 2.5$,
- 4. Deflection amplification factor, $C_d = 2$, and
- 5. Limits on structural height, $h_n = 9.5$ feet (2900 mm).

3114.8.5.3 Allowable shear value. The allowable shear values for the intermodal shipping container side walls (longitudinal) and end walls (transverse) for wind design and seismic design using the coefficients of Section 3114.8.5.2 shall be in accordance with Table 3114.8.5.3, provided that all of the following conditions are met:

- The total linear length of all openings in any individual side walls or end walls shall be limited to not more than 50 percent of the length of that side walls or end walls, as shown in Figure 3114.8.5.3(1).
- Any full height wall length, or portion thereof, less than 4 feet (305 mm) long shall not be considered as a portion of the lateral force-resisting system, as shown in Figure 3114.8.5.3(2).
- 3. All side walls or end walls used as part of the lateral force-resisting system shall have an existing or new boundary element on all sides to form a continuous load path, or paths, with adequate strength and stiffness to transfer all forces from the point of application to the final point of resistance, as shown in Figure 3114.8.5.3(3).
- 4. A maximum of one penetration not greater than a 6-inch (152 mm) diameter hole foreconduits, pipes, tubes or vents, or not greater than 16 square inches (10 322mm²) for electrical boxes, is permitted for each individual 8 feet length (2438 mm) lateral force resisting wall. Penetrations located in walls that are not part of the wall lateral force resisting system shall not be limited in size or quantity. Existing intermodal shipping container's vents shall not be considered a penetration, as shown in Figure 3114.8.5.3(4).
- End wall door or doors designated as part of the lateral force-resisting system shall be welded closed.

TABLE 3114.8.5.3 ALLOWABLE SHEAR VALUES FOR INTERMODAL SHIPPING CONTAINER SIDE WALLS AND END WALLS FOR WIND OR SEISMIC LOADING

CONTAINER DESIGNATION ²	CONTAINER DIMENSION (Nominal Length)	CONTAINER DIMENSION (Nominal Height)	ALLOWABLE SHEAR VALUES (PLF) 1,3	
			Side Wall	End Wall
<u>1EEE</u>	45 feet (13.7 M)	9.5 feet (2896 mm)	<u>75</u>	<u>843</u>

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Department of Development Services: Building and Safety Bureau | Planning Bureau | Code Enforcement Bureau Page 51 of 57 Fire Department: Fire Prevention Bureau Draft Version: 09/09/2019 Department of Public Works

THE 2020 PROPOSED AMENDMENTS TO THE LONG BEACH MUNICIPAL CODE

<u>1EE</u>		8.6 feet (2591 mm)	
<u>1AAA</u>		9.5 feet (2896 mm)	
<u>1AA</u>	40 foot (12.2 M)	8.5 feet (2592 mm)	0.4
<u>1A</u>	40 feet (12.2 M)	8.0 feet (2438 mm)	<u>84</u>
<u>1AX</u>		<8.0 feet (2483 mm)	
1BBB		9.5 feet (2896 mm)	
<u>1BB</u>	20 foot (0.4 M)	8.5 feet (2591 mm)	110
<u>1B</u>	30 feet (9.1 M)	8.0 feet (2438 mm)	<u>112</u>
<u>1BX</u>		<8.0 feet (2438 mm)	
<u>1CC</u>		8.5 feet (2591 mm)	
<u>1C</u>	20 feet (9.1 M)	8.0 feet (2438 mm)	<u>168</u>
<u>1CX</u>		<8.0 feet (2438 mm)	

The allowable strength for the side walls and end walls of the intermodal shipping containers are derived from ISO 1496-1 and reduced by a factor of safety of 5.
Container designation type is derived from ISO 668.
Limitations of Sections 3114.8.5.1 and 3114.8.5.3 shall apply.

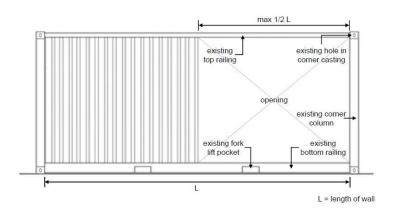


FIGURE 3114.8.5.3(1)
Bracing Unit Distribution – Maximum Linear Length

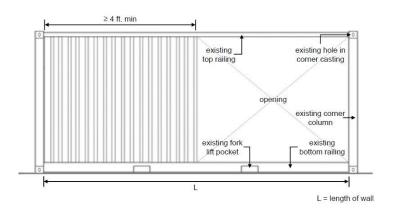


FIGURE 3114.8.5.3(2)
Bracing Unit Distribution – Minimum Linear Length

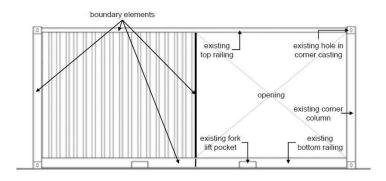


FIGURE 3114.8.5.3(3)
Bracing Unit Distribution – Boundary Elements

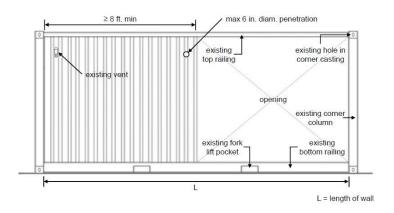


FIGURE 3114.8.5.3(4)
Bracing Unit Distribution – Penetrating Limitations

RATIONALE:

Due to the US trade deficit with other countries, there is an abundant supply of unused intermodal shipping containers, particularly since the City has a shipping port, that have created negative impacts on the environment. This results in more materials that are not recycled and increases energy consumption required to melt down and recycle others that are. The repurposing of existing intermodal shipping containers will help to reduce the environmental impact and improve the sustainability of the community by being less reliant on traditional construction material.

This proposed amendment is based on a similar code provision adopted into the 2021 Edition of the International Building Code. It is intended to assist code officials address the environmental impact of unused materials, reduce consumption of traditional raw materials, minimize non-industrial wastes, and ensure minimum design and safety standards associated with the repurposing of existing intermodal shipping containers as buildings or structures or component of buildings and structures are achieved.

In May 2017, the City Council adopted 29 recommendations to support the production and preservation of affordable and workforce housing. This proposed amendment is in response to *Recommendation 3.10: Encourage the adoption of regulations to allow and incentivize the use of shipping container construction for housing.* The Department engaged in, and worked with, local, State and national agencies and organizations to shape the regulations and code, to facilitate, and thus, incentivize, the use of shipping containers in accordance with Item 3.10.

FINDINGS:

Local Geologic and Climatic Conditions – Amendment is necessary on the basis of a local geologic and climatic condition. The City of Long Beach is a densely populated city having buildings and structures constructed over or near a vast array of fault traces resulting from the active Newport-Inglewood fault

THE 2020 PROPOSED AMENDMENTS TO THE LONG BEACH MUNICIPAL CODE

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Section 18.40.610 is added to Chapter 18.40 of the Long Beach Municipal Code to read as follows:

18.40.610 - Amend CBC Chapter 35—Intermodal shipping containers.

<u>Chapter 35 of the 2019 Edition of the California Building Code is amended to add ISO standards to read as follows:</u>

CHAPTER 35 REFERENCED STANDARDS

<u>iso</u>	International Organization for Standardization SO Central Secretariet 1 ch. de la Voie-Creuse, Casa Postale 566 CH-1211 Geneva 20, Switzerland	
Standard Reference Number	Title_	Referenced in code section number
ISO 1496-1:2013	Series 1 Freight Containers – Specification and Testing – Part 1: General Cargo Containers for General Purposes	3114.8, Table 3114.8.5.3
ISO 6346:1995, with Amendment 3: 2012	Freight Containers – Coding, Identification and marking	<u>3114.3</u>
ISO 668:2013	Series 1 Freight Containers – Classifications, dimensions and ratings.	Table 3114.8.5.3

RATIONALE:

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THE 2020 PROPOSED AMENDMENTS TO THE LONG BEACH MUNICIPAL CODE

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