ORDINANCE NO. 186952

An ordinance amending the Specific Plan for the Management of Flood Hazards, established by Ordinance No. 154,405 and amended by Ordinance Nos. 163,913 and 172,081, to update it to meet current federal standards and to rename it the Flood Hazard Management Ordinance.

WHEREAS, the Congress of the United States enacted the National Flood Insurance Act of 1968, as amended (42 USC 4001 et seq.), the Flood Disaster Protection Act of 1973 (Public Law 93-234, 87 Stat. 975), and subsequent laws for the protection of life and property and to forestall, to the extent possible, flood-related disaster;

WHEREAS, in enacting those laws, Congress has found that:

1. annual losses throughout the nation from floods and mudslides are increasing at an alarming rate, largely as a result of the accelerating development of, and concentration of population in, areas of flood and mudslide hazards;

2. the availability of federal loans, grants, guaranties, insurance and other forms of financial assistance are often determining factors in the utilization of land and the location and construction of public and private industrial, commercial and residential facilities;

3. property acquired or constructed with grants or other federal assistance may be exposed to risk of loss through floods, thus frustrating the purpose for which such assistance was extended;

4. federal instrumentalities insure or otherwise provide financial protection to banking and credit institutions whose assets include a substantial number of mortgage loans and other indebtedness secured by property exposed to loss and damage from floods and mudslides;

5. the nation cannot afford the tragic loss of life caused annually by flood occurrences, nor the increasing losses of property suffered by flood victims, most of whom are still inadequately compensated despite the provision of costly disaster relief benefits; and

6. it is in the public interest for persons already living in flood-prone areas to have both the opportunity to purchase flood insurance and access to more adequate limits of coverage, so they will be indemnified for their losses in the event of future flood disaster; and

WHEREAS, the Flood Disaster Protection Act of 1973:

1. substantially increases the limits of coverage authorized under the National Flood Insurance Program;

2. provides for the expeditious identification of, and the dissemination of information concerning, flood-prone areas;

3. requires state or local communities, as a condition of future federal financial assistance, including disaster relief and federally insured mortgages, to participate in the National Flood Insurance Program and to adopt adequate floodplain ordinances with effective enforcement provisions consistent with federal standards to reduce or avoid future flood losses; and

4. requires the purchase of flood insurance by property owners who are being assisted by federal programs or by federally supervised, regulated or insured agencies or institutions in the acquisition or improvement of land or facilities located or to be located in identified areas having special flood hazards; and

WHEREAS, it is imperative that the City adopt a floodplain management program in order to maintain Regular Status in the National Flood Insurance Program;

WHEREAS, Regular Status significantly increases the limits of coverage and significantly reduces the overall premium rates of flood insurance;

WHEREAS, Congress intended the National Flood Insurance Program to be the minimum basis upon which local communities should design their floodplain management regulations;

WHEREAS, the federal regulations, being designed for national coverage, do not fully recognize certain flood and/or mudflow hazards unique to the western states and particularly to Southern California;

WHEREAS, for the protection of human life, health, safety and for the protection of property, it is essential to fully develop an adequate floodplain management plan;

WHEREAS, the state Constitution empowers to the City the authority to make and enforce all laws and regulations with respect to municipal affairs;

WHEREAS, Section 554 of the City Charter provides that the purpose of the General Plan shall be to serve as a basic and continuous reference in: (a) planning for the development of the City; (b) developing, correlating and coordinating official regulations, controls, programs and services; and (c) attaining coordination of planning and administration by all agencies of the City government, other governmental bodies and private organizations and individuals involved in the development of the City;

WHEREAS, the policies, objectives and programs of the Conservation Plan, an element of the City's General Plan, are consistent with the applicable provisions and intent of the Flood Disaster Protection Act of 1973;

WHEREAS, it is a policy of the Safety Element of the General Plan that "hazards to life and property due to mudflow and storm runoff be minimized";

WHEREAS, Section 554 of the City Charter sets forth the authority for the establishment of ordinances with regulatory controls or incentives as may be required to insure the execution of the General Plan;

WHEREAS, because specific plans are a type of regulatory land use instrument and subject to certain provisions in Chapter One of the City's Municipal Code that are wholly unrelated to the regulations in this Ordinance, the Ordinance is being retitled to the Flood Hazard Management Ordinance; and

WHEREAS, this Ordinance revision, which must be completed by April 20, 2021, in order for the City to continue to be eligible for participation in the National Flood Insurance Program, is per the request of Federal Emergency Management Agency Region IX and the State DWR in order to comply with the Community Assistance Visit that was completed on April 10, 2020.

NOW, THEREFORE,

THE PEOPLE OF THE CITY OF LOS ANGELES
DO ORDAIN AS FOLLOWS:

Section 1. Ordinance No. 154,405 is hereby amended in its entirety to read as follows:

Section 1. PURPOSE AND OBJECTIVES. The City Council hereby establishes this Flood Hazard Management Ordinance, hereafter referred to as the Ordinance. The Ordinance shall apply to all public and private development. This Ordinance provides for the establishment, management and regulatory control of Flood Hazard areas.

Being hazard-specific, the provisions of this Ordinance deal with the unique problems of each hazard in addition to the Citywide policies and goals.

This Ordinance does not imply that land outside the areas of Special Flood Hazard identified on the Los Angeles Flood Hazard Map or that uses permitted within such areas will be free from Flooding or Flood-related damages. This map identifies areas expected to be impacted by One Hundred-Year Floods. As a matter of practicality, the City cannot provide protection against every eventuality and no guarantee is given or implied that all eventualities are protected against.

STATUTORY AUTHORIZATION.

The Legislature of the State of California has, in Government Code Sections 65302, 65560, and 65800, conferred upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Los Angeles in the County of Los Angeles hereby adopts the following floodplain management regulations.

FINDINGS OF FACT.

1. The Flood Hazard areas of the City of Los Angeles are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for Flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

2. These Flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from Flood damage. The cumulative effect of obstructions in areas of special Flood Hazards that increase Flood heights and velocities also contributes to Flood losses.

STATEMENT OF PURPOSE.

1. Protect human life and health;

2. Forestall, to the extent possible, Flood-related disaster (from any cause);

3. Provide a means by which public and private development is planned in such a manner as to avoid or otherwise minimize Flood-related risks to residents and structures on or near hillside areas, as well as upstream or downstream of any project;

4. Minimize expenditure of public money for costly Flood control projects;

5. Minimize the need for rescue and relief efforts associated with Flooding and generally undertaken at the expense of the general public;

6. Provide the authority under which special programs can be devised in order to provide for relief from Flood Hazards;

7. Minimize prolonged business interruptions;

8. 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;

9. 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;

10. Require that potential buyers are notified that property is in an area of special Flood Hazard; and

11. Require that those who occupy the areas of special Flood Hazard assume responsibility for their actions.

Sec. 2. DEFINITIONS. For the purposes of this Ordinance, certain terms require special definitions. All other words or terms not herein defined shall be construed as defined in Sections 11.01, 12.03, and 17.02 of the Los Angeles Municipal Code.

Accessory Structure. A structure that is either:

1. Solely for the parking of no more than two cars; or

2. A small, low cost shed for limited storage, less than 150 square feet and $1,500 in value.

Administrator. The Federal Insurance Administrator. The person delegated the responsibility of the administration of the National Flood Insurance Program.

Appeal. A request for a review of a decision maker's interpretation of any provision of this Ordinance or a request for a Waiver.

Area of Special Mudslide (Mudflow) Hazard. The area subject to severe Mudslides (Mudflow). The area is designated as Zone M on the Flood Insurance Rate Map (FIRM).

Base Flood. Any flood having a one percent chance of being equated or exceeded in any given year. Base Flood may also be referred to as a One Hundred-Year Flood.

Basement. Any area of a building having its floor subgrade below ground level on all sides.

Breakaway Wall. Any type of wall, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic, or any other suitable building material, which is not part of the structural support of the building, and which is designed to break away under abnormally high tides or wave action without causing any damage to the structural integrity of the building on which it is used or any building into which they might be carried by Flood waters. A Breakaway Wall shall have a safe design loading resistance of not less than ten and no more than 20 pounds per square foot. Use of a Breakaway Wall must be certified by a registered engineer or architect and shall meet the following conditions:

1. Breakaway Wall collapse shall result from a water load less than that which would occur during the Base Flood; and

2. The elevated portion of the building shall not incur any structural damage due to the effect of wind and water loads acting simultaneously in the event of the Base Flood.

Coastal High Hazard Area. Any area subject to high velocity waters including, but not limited to, wave wash or tsunami. This area is designated V1-30, V, or VE Zones on the Los Angeles Flood Hazard Map (LAFHM).

Debris. Any natural material including, but not limited to, silt, sand, rock, and wood, and any other objects, including, but not limited to, vehicles and structures or their component parts capable of being transported by water or Mudflow and deposited in a location other than the point of origin.

Developed Area. An area of a community as shown on the Zone AR-Developed Area Map adopted with this Ordinance (using Southern California Association of Governments land use coverage data), and that is:

1. A primarily urbanized, built-up area that is a minimum of 20 contiguous acres, has basic urban infrastructure, including roads, utilities, communications, and public facilities to sustain residential, commercial and industrial activities; and

   (a) within which 75 percent or more of the parcels, tracts or lots contain residential, commercial, or industrial structures or uses; or

   (b) is a single parcel, tract, or lot in which 75 percent of the area contains existing commercial, or industrial structures or uses; or

   (c) is a Subdivision developed at a density of at least two residential structures per acre within which 75 percent or more of the lots contain existing residential structures.

It has been determined that all AR zoned areas within the corporate boundaries of the City of Los Angeles are considered to be developed areas for the purpose of administrating the AR Zone Floodplain management regulations.

2. Undeveloped parcels, tracts, or lots, the combination of which is less than 20 acres, and which are contiguous on at least three sides to areas meeting the criteria of Subdivision 1 above.

3. A Subdivision that is a minimum of 20 contiguous acres that has obtained all necessary government approvals, provided that the actual tart of Construction of structures has occurred on at least:

(a) ten (10%) percent of the lots or remaining lots of a Subdivision or

(b) ten (10%) percent 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 of Subdivision 1, Paragraph (c) above.

Development. Any person-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations. Development may also be referred to as a Project.

Emergency. Any occurrence which by reason of its magnitude is or is likely to become beyond the control of the normal services, personnel, equipment and facilities of the regularly constituted branches and departments of the City.

Existing Construction. Any Development for which Start of Construction commenced prior to October 9, 1980. Existing Construction may also be referred to as Existing Structures.

Existing Manufactured Home Park or Subdivision. A Manufactured Home Park or Subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before October 9, 1980.

Expansion to an Existing Manufactured Home Park or Subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the Manufactured Homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or Flooding.

1. A general and temporary condition of partial or complete inundation of normally dry land areas resulting from:

   (a) overflow of inland or tidal waters, including storm waves or seiches;

   (b) unusual and rapid accumulation or runoff of surface waters from any source;

   (c) rupture or breaching of water retaining structures including, but not limited to, dams, canals, and viaducts, caused by an unpreventable force of nature;

(d) Mudflow which is proximately caused or precipitated by accumulations of water on or under the ground;

(e) the collapse or subsidence of land resulting from Flood-related erosion.

Flood Boundary and Floodway Map (FBFM). The official map issued by the Administrator which delineates Floodways within the City of Los Angeles.

Flood Elevation Determination. A determination by the Administrator or by the City Engineer of the water surface elevations of the Base Flood.

Flood Hazard or Flood-Related Hazard. Any hazard covered by this Ordinance including, but not limited to: Flooding, Mudflow, Coastal High-Hazards, and Flood-Related Erosion.

Flood Hazard Study. An examination, evaluation, and determination of Flood Hazards from all causes and, if appropriate, corresponding water surface elevations; or an examination, evaluation, and determination of Mudflow or Flood-Related Erosion Hazards prepared by a licensed hydrologist or civil engineer.

Flood Insurance. Insurance coverage provided under the National Flood Insurance Program.

Flood Insurance Rate Map (FIRM). The official map issued by the Administrator delineating both the Special Hazard Areas and the risk premium zones for the City of Los Angeles.

Flood Protection System. Structural works which have been constructed specifically to modify Flooding in order to reduce the extent of the area and/or of Flood waters within areas of Special Flood Hazard. Such a system of specialized flood modifying works typically includes hurricane tidal barriers, dams, reservoirs, levees, dikes, and improved channels, and are constructed in conformance with sound engineering standards.

Floodplain or Flood-prone Area. Any land susceptible to being inundated by water from any source (see definition of Flooding).

Flood-proofing. Any combination of structural and non-structural additions, changes or adjustments to structures which reduce or eliminate Flood-related damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Flood-Related Erosion Hazard Area or Flood-Related Erosion-Prone Area. An area which is likely to suffer Flood-related erosion damage resulting from the collapse or subsidence of land along the shore or bank of an ocean, lake, river, or watercourse as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of

water, resulting from a severe storm, or by an unanticipated force of nature, such as a tsunami, an abnormal tidal surge, flash flood, or some similarly unusual and unforeseeable event which results in Flooding.

Floodway. The channel of a river or other major drainage course and the adjacent land area that must be reserved in order to discharge the Base Flood without cumulatively increasing the water surface elevation more than 1 foot.

Freeboard. A factor of safety denoting the vertical distance above a Flood level for the purposes of floodplain management. The determination of Freeboard should take into account factors that could contribute to Flood heights greater than the height calculated for a selected size Flood and Floodway conditions, such as wave action, bridge openings and the hydrological effect of urbanization of the watershed and/or burn of the natural vegetation cover of the watershed.

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

Highest Adjacent Grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a Structure-.

Historic Structure.

Any Structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs.

Los Angeles Flood Hazard Map (LAFHM). The official map for the City of Los Angeles showing the boundaries of hazard areas and consisting of a number of separate sheets, actual or computer-stored, bearing marks, notations, references and other pertinent information.

Lowest Floor. The lowest floor of the lowest enclosed area (including Basement). An unfinished or Flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a Basement area, is not considered a building's Lowest Floor, provided that such enclosure is built so that it does not violate the applicable non-elevation design requirements of this Ordinance.

Manufactured Home. A Structure, transportable in one or more sections which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. Recreational vehicles or travel trailers used only for vacations are not considered Manufactured Homes. The term includes, but is not limited to, the definition of "Manufactured Home" as set forth in the regulations governing the Mobile Home Safety and Construction Standards Program (24 CFR 3282.7(u)). For floodplain management purposes the term "Manufactured Home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.

Manufactured Home Park or Subdivision. A parcel (or contiguous parcels) of land divided into two or more Manufactured Home lots for rent or sale and having facilities for servicing the lot on which the Manufactured Home is to be affixed (including at a minimum site grading or the pouring of concrete pads, installation of utilities and the construction of streets).

Market Value. Shall be determined by estimating the cost to replace the Structure in new condition and adjusting that cost figure by the amount of depreciation which has accrued since the structure was constructed.

1. The cost of replacement of the structure shall be based on a square foot cost factor determined by reference to a building cost estimating guide recognized by the building construction industry.

2. The amount of depreciation shall be determined by taking into account the age and physical deterioration of the structure and functional obsolescence as approved by the floodplain administrator, but shall not include economic or other forms of external obsolescence.

   Use of replacement costs or accrued depreciation factors different from those contained in recognized building cost estimating guides may be considered only if such factors are included in a report prepared by a licensed appraiser registered in the State of California, Department of Consumer Affairs, Bureau of Real Estate (BRE) Appraisers and supported by a written explanation of the differences.

Mean Sea Level. The National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood elevations shown on the Community Flood Insurance Rate Maps (FIRM) are referenced and applicable to the National Flood Insurance Program (NFIP).

Mudflow. The condition wherein there is a river, flow, or inundation of liquid mud down a hillside usually, but not limited to, the result of a dual condition of loss of brush cover and the subsequent accumulation of water on or under the ground preceded by a period of unusually heavy or sustained rain. A Mudflow may occur as a distinct phenomenon while a landslide is in progress.

Mudflow-Prone Areas. An area with land surfaces and slopes of unconsolidated material where the history, geology and climate indicate a potential for Mudflow.

Mudslide. Describes a condition where there is a river, flow, or inundation of liquid mud down a hillside, usually as a result of a dual condition of loss of brush cover and the subsequent accumulation of water on the ground, preceded by a period of unusually heavy or sustained rain.

New Construction, New Development, or New Project. Any public project or any phase of a public project for which a contract has not been entered into, or any private project for which a grading or building permit is issued on or after October 9, 1980. It is not intended in this definition that the issuance of a grading permit prior to October 9, 1980 abrogate the necessity for compliance with this Ordinance for any additional permits issued on or after October 9, 1980.

New Manufactured Home Parks or New Manufactured Home Subdivision. Any Manufactured Home Park or Manufactured Home Subdivision for which a grading or building permit is issued on or after October 9, 1980.

One Hundred-Year Flood. See definition of Base Flood.

Ordinance. The Flood Hazard Management Ordinance.

Person. Includes any individual or group of individuals, corporation, partnership, association or other entity, including federal, state, regional and local governments and agencies.

Project. See definition of Development.

Recreational vehicle means a vehicle which is:

1. Built on a single chassis;

2. 400 square feet or less when measured at the largest horizontal projection;

3. Designed to be self-propelled or permanently towable by a light duty truck; and

4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Shallow Flooding Area. A designated AO, AH, AR/AO, or AR/AH Zone on the LAFHM with Base Flood depths from 1 to 3 feet where a clearly defined channel does not exist, where the path of Flooding is unpredictable and indeterminate and where velocity flow may be evident. Such flow is characterized by ponding or sheet flow.

Special Flood Hazard Area. All land in the Floodplain subject to a one percent or greater chance of Flooding in any given year. This area is designated as A, AO, AE, AH, AI-30, A-99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, V, VE, and VI-30 Zones on the LAFHM.

Special Flood-Related Erosion Hazard Area. Land which is most likely to be subject to severe flood-related erosion losses. This area is a designated E Zone on the LAFHM.

Special Hazard Area. An area having special Flood, Mudflow, Coastal High Hazard or Flood-Related Erosion Hazards and shown on a FIRM or FBFM as Zone A, AO, AE, AH, AI-30, A-99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, V1-30, VE, or V.

Special Mudflow Hazard Area. Land which is most likely to be subject to severe Mudflow. This area is a designated Zone M on the LAFHM.

Start of Construction. For other than New Construction or a Substantial Improvement under the Coastal Barrier Resources Act (Pub. L 92-348), means the date the building permit was issued, provided the actual commencement of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. The actual commencement of construction means the first placement of permanent construction of a Structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; and includes the placement of a Manufactured Home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installat1980ion of streets or walkways; nor does it include excavation for a Basement, footings, piers, or foundations or erection of temporary forms; nor does it include the installation on the property of Accessory Buildings, such as garages or sheds not occupied as dwelling units or not part of the main Structure.

Structure. Anything constructed or erected either upon or below the surface of the earth and which is supported directly or indirectly by the earth including Manufactured Homes.

Substantial Damage.

1. Damage of any origin sustained by a Structure whereby the cost of restoring the Structure to its before damaged condition would equal or exceed 50 percent of the Market Value of the Structure before the damage occurred; or

2. Flood-related damages sustained by a Structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such event, on the average, equals or exceeds 25 percent of the Market Value of the Structure before the damage occurred. This is also known as "repetitive loss."

Substantial improvement. Any reconstruction, rehabilitation, addition, or other improvement of a Structure, the cost of which equals or exceeds 50 percent of the Market Value of the Structure before the Start of Construction of the improvement. This term includes a Structure which has incurred Substantial Damage, regardless of the actual repair work performed. Substantial Improvement does not include either:

1. Any Project for improvement of a Structure to correct existing violations or state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

2. Any alteration of a Historic Structure provided that the alteration will not preclude the Structure having continued designation as a Historic Structure.

Violation. The failure of a Structure or other Development to be fully compliant with this Ordinance. A Structure or other Development without the elevation certificate, other certifications, or other evidence of compliance required in this Ordinance is presumed to be in violation until such time as that documentation is provided.

Waiver. A grant of relief from any or all of the terms of this Ordinance or implementing regulations thereof.

Water Surface Elevation. The projected heights in relation to National Geodetic Vertical Datum (NAVD) of 1988 or other datum reached by Floods of various magnitudes and frequencies in the Flood Plains of coastal, lacustrine, riverine, or other riparian areas.

Zones - following are the Special Flood Hazard zones as shown on the LAFHM:

A Zone - areas of One Hundred-Year Flood where the Base Flood elevations and flood hazard factors have not been determined.

AE, A1-30 Zones - areas of One Hundred-Year Flood where the Base Flood elevations and Flood Hazard factors have been determined.

AH Zone - areas of One Hundred-Year Flood where Flood depths are between 1 and 3 feet and Base Flood elevations have been determined, but no Flood Hazard factors have been determined.

AO Zone - areas of One Hundred-Year Flood where Flood depths are between 1 and 3 feet and average depths of inundation are shown, but no Flood Hazard factors have been determined.

AR Zone - 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 One Hundred-Year or greater level of Flood protection.

A99 Zone - a Special Flood Hazard Area that results from the decertification of a previously accredited flood protection system that is determined to be substantially restored to provide a One Hundred-Year or greater level of Flood protection where Base Flood elevations and Flood Hazard factors have not been determined.

D Zone - areas of undetermined, but possible, Flood Hazards.

V Zone - areas of coastal One Hundred-Year Flood with velocity (wave action) where Base Flood elevations and Flood Hazard factors have not been determined.

VE, V1-30 Zones - areas of coastal One Hundred-Year Flood with velocity (wave action) where Base Flood elevations and Flood Hazard factors have been determined.

X-Shaded/B Zone - areas between limits of the One Hundred-Year Flood and Five Hundred-Year Flood; or certain areas subject to a One Hundred-Year Flood with average depths less than 1 foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the Base Flood.

X-Unshaded/C Zone - areas of minimal Flooding.

Sec. 3. LOS ANGELES FLOOD HAZARD MAP. The LAFHM shall be established and revised by Ordinance. The LAFHM is on file in the office of the Floodplain Administrator.

A. The LAFHM shall include:

1. the FIRM (effective Jul 6, 1998), the Digital FIRM (effective December 2, 1980) and the FBFM, and any subsequent updates, which, together with the Flood Insurance Study for the City of Los Angeles and any subsequent updates issued by the Federal Insurance Administration, are by this reference incorporated herein.

2. other maps designated by the City Council.

B. The LAFHM shall be executed at a scale sufficient to allow a lot-by-lot determination of applicability to these regulations.

C. Copies of the LAFHM shall be available for inquiry and inspection at the public counters in the central and district offices of the:

1. Department of City Planning

2. Bureau of Engineering

3. Department of Building and Safety

D. The Bureau of Engineering shall be responsible for maintaining the official maps and providing the Department of City Planning and BOE map data updates as they are made available by the Federal Emergency Management Agency (FEMA).

Sec. 4. POLICIES.

A. General Provisions.

1. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD. The areas of special flood hazard identified by the FEMA in the Flood Insurance Study (FIS) for The Los Angeles County dated December 2, 1980, with accompanying FIRM's and FBFM's, dated December 2, 1980, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this Ordinance. This FIS and attendant mapping is the minimum area of applicability of this Ordinance and may be supplemented by studies for other areas which allow implementation of this Ordinance and which are recommended to the City of Los Angeles by the Floodplain Administrator. The study, FIRM's and FBFM's are on file at the Bureau of Engineering.

   As changes and revisions to the FIRMs and FBFM's occur, newly added properties to the Special Flood Hazard Areas are to be notified by the Bureau of Engineering.

2. COMPLIANCE. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Ordinance and other applicable regulations. Violation of the requirements (including violations of conditions and safeguards) shall constitute a misdemeanor. Nothing herein shall prevent the City of Los Angeles from taking such lawful action as is necessary to prevent or remedy any violation.

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

4. INTERPRETATION. In the interpretation and application of this Ordinance, all provisions shall be:

    1. Considered as minimum requirements;

    2. Liberally construed in favor of the governing body; and

    3. Deemed neither to limit nor repeal any other powers granted under state statutes.

5. WARNING AND DISCLAIMER OF LIABILITY. The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by human-made or natural causes. This Ordinance does not imply that land outside the areas of Special Flood Hazards or uses permitted within such areas will be free from flooding or flood damages. This Ordinance shall not create liability on the part of the City of Los Angeles, any officer or employee thereof, the State of California, or FEMA, for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made hereunder.

B. Citywide. It is the City's policy that:

1. Public and private development be prohibited in areas where flood-related hazards would seriously endanger human life, health or property.

2. Nonessential public utilities, public or quasi-public facilities not be located in special hazard areas; but when public utilities, public or quasi-public facilities must be located in hazard areas, that they are constructed to minimize or eliminate any Flood Hazards.

3. As the General Plan elements and Community Plans are restudied and revised, areas needing the protection provided by this Ordinance will be appropriately designated.

4. The City consider, during the processing of development proposals, the potential for flooding and flood-related damage in areas not otherwise identified as flood hazard areas due to factors including, but not limited to, the rupture, breakage, or structural failure of a dam, reservoir, aqueduct, or other large water or sewer conduit, whether by an earthquake or by any other cause.

5. Uses compatible with flooding shall be encouraged in Special Hazard Areas as opposed to other uses.

6. The City, in considering proposals for all new public and private development, take into account the potential for adverse effects on development already existing within Special Hazard Areas.

7. All future public and private developments including rehabilitation, reconstruction, and add-on construction be located and designed with regard to Flood-Related Hazards.

8. All development presently existing in Flood-Related Hazard Areas be encouraged to institute protective and remedial measures for protection from Flood Hazards.

9. Land subject to repeated and/or severe flood damage where feasible and practicable be acquired by the City and held as open space or be used in a manner compatible with Flood-Related Hazards.

10. The City prepares flood warning and emergency preparedness plans as a part of the City's Emergency Preparedness Plan, with an emphasis on phased early warning to citizens in potentially affected areas.

11. Alternative access and escape routes be designated when normal routes may be blocked or destroyed by flooding.

12. All persons who occupy property subject to flood hazards bear full responsibility for their actions.

13. As more information becomes available or new situations arise, additional flood hazard studies be undertaken and, pursuant to such studies, provisions be added to this Ordinance as necessary for the fullest implementation of the spirit and intent of the Ordinance.

14. The City coordinates its efforts in the management of flood-related hazard areas with neighboring jurisdictions.

15. Means be sought by which relief from flood-related disasters can be expedited.

16. The broadest range of design and construction alternatives consistent with this Ordinance be considered for new development in flood-related hazard areas.

17. The City seeks innovative means to achieve the goals and to carry out the intent and purpose of this Ordinance.

18. Demonstration grants be applied for as one of many methods to carry out the programs of this Ordinance.

C. Floodways. In addition to citywide policies, in Floodways it is the policy of the City that:

1. Drainage channels adequate to discharge the flood waters or runoff of a Base Flood be preserved from encroachment in areas which are still substantially undeveloped.

2. No new development be allowed in Floodways.

3. Where existing development now occupies Floodways measures be taken to either:

   a. Provide flood works sufficient to discharge a Base Flood, or

   b. Encourage relocation of such development outside of areas which must be preserved as Floodways as required for the overall safety, health, and well-being of the community.

4. Floodways be maintained in good repair and free of debris by the agency or organization (public or private) responsible for such activity.

D. Floodplains. In addition to citywide policies, in floodplains it is the policy of the City that:

1. The existence and extent of flooding be considered in the planning, siting, design and construction of public and private development, and

2. Full consideration be given to the fact that development in flood-prone areas may create a potential for loss of life and personal injuries, loss to public and private property and exposure to flood hazards.

E. **Mudflow-Prone Areas.** In addition to the citywide policies, in Mudflow-Prone Areas it is the policy of the City that:

1. The existence and extent of mudflow hazard areas be considered in the planning, siting, design and construction of public and private development.

2. Full consideration be given to the fact that development in Mudflow-Prone Areas may create a potential for loss of life and personal injuries, loss to public and private property and exposure to hazards.

F. **Coastal High-Hazard and Flood-Related Erosion Hazard Areas**. In addition to the Citywide policies, in Coastal High-Hazard Areas and Flood-Related Erosion Hazard Areas, including Special Flood-Related Erosion Hazard Areas, it is the policy of the City that:

1. The existence and extent of coastal high-hazard and/or flood-related erosion be considered in the planning, siting, design and construction of public and private development, and

2. Full consideration be given to the fact that development in Coastal High-Hazard or Flood-Related Erosion Areas may create a potential for loss of life and personal injuries, loss to public and private property and exposure to Coastal High-Hazard and/or Flood-Related Erosion Hazards.

Sec. 5. DEVELOPMENT REGULATIONS. This section prescribes the regulations by which all New Construction and Substantial Improvements to public and private development shall be governed.

A. **General.**

1. These regulations apply to the Special Flood Hazard Area designations and water surface elevations furnished by the Administrator and the City Engineer.

2. To the extent permitted by law, all public and private development shall be subject to these regulations, and construction may not commence without compliance with the provisions and intent of this Ordinance, and without the necessary permits from those governmental agencies whose approval is required by local, state, and federal law.

3. These regulations shall be considered to be the minimum requirements and where sound engineering and prudence demand, such additional measures shall be taken to assure full compliance with the intent and purpose of this Ordinance.

4. This section shall not create liability on the part of the City of Los Angeles, the United States or any officer or employee thereof.

5. It is not the intent of these regulations to abrogate or lessen in any respect any other provision of the Los Angeles Municipal Code. Should any provisions of this section conflict with any other provision of the Los Angeles Municipal Code, the more restrictive provision shall prevail.

B. Planning Discretionary Reviews.

1. Applications and procedures for zone changes, variances, conditional use permits, divisions of land, coastal development permits, environmental clearances, or any other permit procedure pertinent to this Ordinance shall contain additional information on the application forms sufficient to determine the existence and extent of Flood-Related Hazards, and to provide sufficient data to enable thorough and complete review of the development as it relates to this Ordinance.

2. For all projects processed by the Department of City Planning, including the office of Zoning Administration, a finding of fact shall be made as to whether or not a project is located within a Special Hazard Area. For projects found to be located in a Special Hazard Area, the following finding shall be made: "The project conforms with both the specific provisions and the intent of the Floodplain Hazard Management Ordinance." Specific factual evidence supporting this finding shall be contained in the record pertaining to the project.

3. No new zone variance or conditional use permit may be granted or existing zone variance or conditional use permit extended for development within a Floodway.

4. Subdivisions. Notwithstanding the provisions of Section 5.A.1, herein, these regulations shall also apply to all subdivisions located within the boundaries of a "Hillside Area", as that term is defined in Section 12.03 of the Municipal Code.

    a. Subdivisions shall be designed in such a manner as to prevent flood-related damage to the subdivision and to existing watershed development, both during and subsequent to construction.

    b. Public and private drainage and sanitary facilities and utilities shall be designed and installed so as to eliminate or minimize damage from Flood-Related Hazards.

c. For areas involving natural or human-made channels for potential run-off of a Base Flood, subdividers shall be required to furnish delineation for Floodways, if not already mapped or if changes are proposed to the mapped Floodways.

d. Alterations of drainage courses shall be governed by the procedure set forth in Section 8 of this Ordinance, Alteration of Drainage Courses.

e. All division of land proposals shall include within such proposals Base Flood elevation data.

f. Provisions for alternative vehicular access and escape routes when normal routes are blocked or destroyed by flooding and/or Mudflow shall be required wherever possible.

g. The City, in approving the location of new Manufactured Home Parks, shall require an evacuation plan indicating alternate vehicular access and escape routes to be filed with the Emergency Operations Board.

h. All new subdivisions proposals and other proposed development greater than 50 lots or 5 acres (whichever is the lesser), including proposals for Manufactured Home Parks and Subdivisions, shall:

    1. Identify the Special Flood Hazard Areas and Base Flood elevations.

    2. Identify the elevations of lowest floors of all proposed structures and pads on the final plans.

    3. If the site is filled above the Base Flood elevation, the following as-built information for each structure shall be certified by a registered civil engineer or licensed land surveyor and provided as part of an application for a "Letter of Map Revision Based on Fill" to the Floodplain Administrator:

        i. Lowest floor elevation,

        ii. Pad elevation, and

        iii. Lowest adjacent grade.

i. All subdivision proposals and other proposed development shall be consistent with the need to minimize flood damage.

j. All subdivision proposals and other proposed development shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

k. All subdivisions and other proposed development shall provide adequate drainage to reduce exposure to Flood Hazards.

C. Construction Regulations.

1. **General.**

a. All public and private development which has the potential to cause flooding or mud damage to neighboring communities shall be designed in such a manner as to be consistent with the floodplain management programs of those communities.

b. Site exploration and investigation by the developer shall be required before approving any development in a Special Flood-Related Hazard Area.

c. Insofar as enforceable by State law, public and quasi-public facilities, including schools, hospitals, nursing homes, orphanages, correctional and other residential institutions, fire and police stations, communication centers, electric power transformers and substations, water and sewer pumping stations and any other public or quasi-public institutions situated in a Special Hazard Area shall be located and designed so as to enable them to withstand flood-related damage and to facilitate emergency operations.

d. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate:

1. Infiltration of flood waters into the systems; and

2. Discharge from the systems into flood waters.

e. On-site waste disposal systems shall be located to avoid impairment to them, or contamination from them during flooding.

f. It shall be mandatory that sellers, lessors, or renters give written notice to all prospective and interested parties, including but not limited to, purchasers, lessees and centers, prior to finalization of such a transaction when the subject land and/or structures are located within special hazard areas. The notice shall contain the following information:

1. The nature and classification of the special hazard,

2. The hazard zone designation,

3. Whether Waivers have been granted for development located within the Special Hazard Area, and

4. That premium rates for Flood Insurance of new structures built at elevations below the Base Flood shall substantially increase as the elevations decrease. Failure to give such notice shall be a basis for rescinding any sale, lease, or rental agreement.

2. **Standards of Construction**

In all Special Flood Hazards Areas the following standards are required:

a. **Anchoring.** All New Construction and Substantial Improvements of structures, including Manufactured Homes, shall be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

b. **Construction Materials and Methods**.

All New Construction and Substantial Improvements of structures, including Manufactured Homes, shall be constructed:

1. With flood resistant materials, and utility equipment resistant to flood damage for areas below the Base Flood elevation;

2. Using methods and practices that minimize flood damage;

3. With electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding; and

4. Within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

c. **Elevation and Floodproofing.**

1. **Residential Construction**.

All New Construction or Substantial Improvements of residential structures shall have the lowest floor, including basement:

a. In AE, AH, A1-30 Zones, elevated to 1 foot above the Base Flood elevation.

b. In an AO zone, elevated above the highest adjacent grade to a height equal to one-foot above the depth number specified in feet on the FIRM, or elevated at least 2 feet plus 1 foot of Freeboard above the highest adjacent grade if no depth number is specified.

c. In an A zone, without Base Flood elevations specified on the FIRM [unnumbered A zone], elevated to or above the Base Flood elevation plus one-foot of Freeboard.

Upon the completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered civil engineer or licensed land surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

2. **Nonresidential Construction.**

All New Construction or Substantial Improvements of nonresidential structures shall either be elevated to conform with Residential Construction or:

a. Be floodproofed, together with attendant utility and sanitary facilities, below the elevation recommended under Residential Construction, so that the structure is watertight with walls substantially impermeable to the passage of water;

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

c. Be certified by a registered civil engineer or architect that the standards Residential Construction and Nonresidential Construction are satisfied. Such certification shall be provided to the Floodplain Administrator.

3. **Flood Openings**. All New Construction and Substantial Improvements of structures with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must meet the following minimum criteria:

a. For non-engineered openings:

1. Have a minimum of two openings on different sides having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

2. The bottom of all openings shall be no higher than one foot above grade;

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

4. Buildings with more than one enclosed area must have openings on exterior walls for each area to allow flood water to directly enter; or

b. Be certified by a registered civil engineer or architect.

4. **Garages and Low Cost Accessory Structures**.

a. Attached garages.

1. A garage attached to a residential structure, constructed with the garage floor slab below the Base Flood elevation, must be designed to allow for the automatic entry of flood waters per Flood Opening, as described above. Areas of the garage below the Base Flood elevation must be constructed with flood resistant materials per Construction Materials and Methods.

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

b. Detached garages and Accessory Structures.

1. Accessory Structures may be constructed such that its floor is below the Base Flood elevation, provided the structure is designed and constructed in accordance with the following requirements:

a. Use of the Accessory Structure must be limited to parking or limited storage;

b. The portions of the Accessory Structure located below the Base Flood elevation must be built using flood-resistant materials;

c. The Accessory Structure must be adequately anchored to prevent flotation, collapse and lateral movement;

d. Any mechanical and utility equipment in the Accessory Structure must be elevated or floodproofed to or above the Base Flood elevation plus Freeboard;

e. The Accessory Structure must comply with floodplain encroachment provisions for detached garages and Accessory Structures; and

f. The Accessory Structure must be designed to allow for the automatic entry of flood waters in accordance with the provisions pertaining to Flood Openings above.

2. Detached garages and Accessory Structures not meeting the above standards must be constructed in accordance with all applicable standards for garages and Accessory Structures above.

3. **Floodways**.

Since Floodways are an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

a. Until a regulatory Floodway is adopted, no New Construction, substantial development, or other development (including fill) shall be permitted within Zones A1-30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than one foot at any point within the City of Los Angeles.

b. Within an adopted regulatory Floodway, the City of Los Angeles shall prohibit encroachments, including fill, New Construction, Substantial Improvements, and other development, unless certification by a registered civil engineer is provided demonstrating that the proposed encroachment shall not result in any increase in Flood levels during the occurrence of the base flood discharge.

c. All development existing within Floodways at the time of the adoption of Ordinance No. 154,405 (effective October 9, 1980) may continue. No grants, privileges or considerations shall be given which would prolong the life of the development unless alternative means are provided for the unimpeded discharge of a base flood.

d. Manufacturing buildings or other facilities in which hazardous substances are stored, manufactured or used shall be prohibited within any Floodway.

4. **Floodplains**. In addition to the General Regulations, the following shall apply in Special Flood Hazard Areas:

a. The lowest floor of all residential structures shall be constructed at least 1 foot above the Base Flood elevation, and in Zones AH, AO and VO shall be elevated above the highest adjacent grade at least 1 foot higher than the depth number specified in feet on the FIRM, or at least 2 feet if no depth number is specified. Non-residential structures may be floodproofed in lieu of elevation. The elevation of the lowest floor shall be provided to and maintained by the Superintendent of Building and Safety. In any case, construction below the Base Flood level shall use flood-resistant materials. In areas where base flood data has not been furnished by the Administrator, the City Engineer shall provide the Base Flood elevation.

b. Adverse cumulative effects of new development on development already existing in floodplains shall be considered in determining whether to issue a permit, and the new development shall not be approved unless it can be adequately demonstrated that the project will not increase the exposure of existing development to Flood-Related Hazards.

c. All New Construction and Substantial Improvements in areas subject to subsidence shall have the lowest floor elevated a minimum of one foot above the Base Flood level plus a factor for the expected subsidences for the life of the structure and the elevation of the lowest floor shall be provided to and maintained by the Superintendent of Building and Safety.

d. For all New Construction and Substantial Improvements, fully enclosed areas below the Lowest Floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

e. Floodproofing. Where floodproofing is utilized, either a registered professional engineer or architect shall certify that the flood proofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the Base Flood and a record of such certificates indicating the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Superintendent of Building.

5. **Standards for Manufactured Homes.**

a. All Manufactured Homes that are placed or substantially improved, on sites located: (1) outside of a Manufactured Home Park or Subdivision; (2) in a new Manufactured Home Park or Subdivision; (3) in an expansion to an existing Manufactured Home Park or Subdivision; or (4) in an existing Manufactured Home Park or Subdivision upon which a Manufactured Home has incurred Substantial Damage as the result of a flood, shall:

1. Within Zones A1-30, AH, and AE on the community's Flood Insurance Rate Map, be elevated on a permanent foundation such that the Lowest Floor of the Manufactured Home is elevated 1 foot above the Base Flood elevation and be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

2. Within Zones V1-30, V, and VE on the community's Flood Insurance Rate Map, meet the requirements of Coastal High Hazards Areas.

b. All Manufactured Homes to be placed or substantially improved on sites in an existing Manufactured Home Park or Subdivision within Zones A1-30, AH, AE, V1-30, V, and VE on the community's Flood Insurance Rate Map that are not subject to the provisions of Manufactured Homes will be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement, and be elevated so that either the:

1. Lowest Floor of the Manufactured Home is at least 1 foot above the Base Flood elevation; or

2. Manufactured Home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.

Upon the completion of the structure, the elevation of the Lowest Floor, including basement, shall be certified by a registered civil engineer or licensed land surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

c. Within Zones AO, AH, and AE on the LAFHM, for all new Manufactured Home Parks and Manufactured Home Subdivisions, expansions to existing Manufactured Home Parks and Manufactured Home Subdivisions and existing Manufactured Home Parks and Manufactured Home Subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds 50% of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced, and for all Manufactured Homes to be placed within Zones Al-30, A-99, AO, AH and AE on the LAFHM, but not into a Manufactured Home Park or Manufactured Home Subdivision, the following shall be required:

1. Stands or lots shall be elevated on compacted fill or on pilings so that the lowest floor of the Manufactured Home will be at least 1 foot above the Base Flood level;

2. Adequate surface drainage and access for a hauler shall be provided; and

3. In the instance of elevation on pilings, lots shall be large enough to permit steps, piling foundations shall be placed in stable soil no more than 10 feet apart and reinforcement shall be provided for pilings more than 6 feet above the ground level.

4. In areas of flooding, adequate Freeboard and additional Floodproofing, where necessary, shall be required.

6. **Standards for Recreational Vehicles.**

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

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

2. Be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

3. Meet the permit requirements of this Ordinance and the elevation and anchoring requirements for Manufactured Homes.

b. Recreational vehicles placed on sites within Zones V1-30, V, and VE on the community's Flood Insurance Rate Map will meet the requirements of Recreational Vehicles and Coastal High Hazard Areas.

7. **Mudflow Areas and Mudflow-prone Areas**. In addition to the general regulations, the following shall apply in Special Mudflow Hazard Areas:

a. Each permit application shall be reviewed to determine whether the proposed site and improvements will be reasonably safe from Mudflows.

b. To the extent permitted by State law the location and design of public utilities and service facilities, such as sewer, water, gas, and electrical systems shall be such as to minimize exposure to Mudflow hazards.

c. Require, if a proposed site and improvements may have Mudflow hazards, that:

1. Site investigation review be made by persons qualified and licensed in geology and/or soil engineering to ascertain the location and extent of the Mudflow hazard and to recommend remedial measures;

2. The proposed grading, excavations, New Construction and Substantial Improvements are adequately designed and protected to withstand Mudflow damages;

3. The proposed grading, excavations, New Construction and Substantial Improvements do not aggravate the existing hazard by creating either on-site or off-site disturbances; and

4. The proposed drainage, planting, watering and maintenance be such as not to endanger slope stability.

d. Enforce and periodically review the grading ordinance or regulations with regard to the following:

1. Regulation of the location of foundation systems and utility systems of New Construction and Substantial Improvements;

2. Regulation of the location, drainage and maintenance of all excavations, cuts and fills and planted slopes;

3. Providing special requirements for protective measures including, but not necessarily limited to, retaining walls, buttress fills, subdrains, diverter terraces, benchings, etc.; and

4. Requiring engineering drawings and specifications to be submitted for all corrective measures, accompanied by supporting soils engineering and geology reports.

8. **Coastal High-Hazard**. In addition to the General Regulations, within Coastal High Hazard Areas, Zones V, V1-30, and VE, the Flood Hazard Mitigation Coordinator shall submit updated map data to Bureau of Engineering and Department of City Planning automated mapping systems on an annual basis, at minimum, or upon updates to the map, and shall be required in Coastal High Hazard Areas.

   a. All new residential and non-residential construction, including substantial improvement/damage, shall be elevated on adequately anchored pilings or columns and securely anchored to such pilings or columns so that the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to one-foot above the Base Flood level. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable state or local building standards. A registered civil engineer, structural engineer or architect shall certify that the structure is securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash.

   b. All New Construction and other development shall be located on the landward side of the reach of mean high tide.

   c. All New Construction and substantial improvement shall have the space below the lowest floor free of obstructions or constructed with "breakaway walls" intended to collapse under stress without jeopardizing the structural support of the structure so that the impact on the structure by abnormally high tides or wind-driven water is minimized. Such temporarily enclosed space shall not be used for human habitation and will be usable solely for parking of vehicles, building access or storage.

   d. Fill shall not be used for structural support of buildings.

e. Artificial alteration of sand dunes which would increase potential flood damage is prohibited.

f. The Floodplain Administrator shall obtain and maintain the following records:

   1. Certification by a registered engineer or architect that a proposed structure complies with Coastal High Hazard Areas; and

   2. The elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings or columns) of all new and substantially improved structures, and whether such structures contain a basement.

g. Each permit application shall contain information sufficient to determine whether the proposed site alterations and improvements will be reasonably safe from coastal high-hazards and will not cause or otherwise aggravate the existing coastal high-hazards. Each application shall further provide the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings or columns) of all new and substantially improved structures and whether such structures contain a basement; and the Superintendent of Building and Safety shaft maintain a record of such elevations.

h. Where a proposed improvement is found to be in the path of coastal high-hazards or to increase coastal high-hazards, require the improvement to be relocated or adequate protective measures to be taken which will not aggravate the hazard or shift the hazard to another location.

i. The placement of Manufactured Homes, except in existing Manufactured Home Parks and Manufactured Home Subdivisions, within Zones V1-30, V or VE on the LAFHM will not be prohibited if they are in compliance with conventional housing standards.

9. **Flood-related Erosion Hazard Areas**. In addition to the general regulations, the following shall be required in areas of special flood-related erosion hazards:

   a. Each permit application for construction or other development shall contain sufficient information to determine the extent of exposure to flood-related erosion hazards and to provide sufficient data to enable thorough review of the development;

b. Each permit application shall be reviewed to determine whether the proposed site alterations and improvements will be reasonably safe from flood-related erosion and will not cause or otherwise aggravate the existing flood-related erosion hazard; and

c. Where a proposed improvement is found to be in the path of flood-related erosion or to increase the erosion hazard, require the improvement to be relocated or adequate protective measures to be taken which will not aggravate the existing erosion hazard.

d. All new development shall be set back from the ocean, lake, bay, river front or other body of water to create a safety buffer consisting of natural vegetation or a contour strip. The buffer may be used for suitable open space purposes, such as for open space purposes and temporary and portable structures only.

10. **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, including Manufactured Homes, in areas designated as developed areas shall meet the standards of this section, using the lower of either the AR Base Flood elevation or the elevation that is 3 feet above the highest adjacent grade.

    b. Non-developed Areas. All New Construction, including Manufactured Homes, in areas that are not designated as developed areas:

        1. Where the AR flood depth is equal to or less than 5 feet above the highest adjacent grade - shall meet the standards of this section, using the lower of either the AR Base Flood elevation or the elevation that is 3 feet above the highest adjacent grade; or

        2. Where the AR flood depth is greater than 5 feet above the highest adjacent grade - shall meet the standards of this section, using the AR Base Flood elevation.

    c. Dual Zone Areas.

        1. All New Construction in areas within Zones AR/A1-30, AR/AE, AR/AH, AR/AO or AR/A shall meet the standards of this section, using the higher of either the applicable AR Zone elevation or the Base Flood elevation (or flood depth) for the underlying A1-30, AE, AH, AO or A Zone.

2. 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 this section, using the Base Flood elevation (or flood depth) for the underlying A1-30, AE, AH, AO or A Zone.

3. All Manufactured Homes that are placed or substantially improved (in Dual Zones only) within Zones AR/A1-30, AR/AE, AR/AH, AR/AO, or AR/A shall be elevated on a permanent foundation such that the lowest floor of the Manufactured Home is elevated in accordance with the elevation requirements prescribed in Standards of Construction for Manufactured Homes and Recreational Vehicles.

Sec. 6. CITY IMPLEMENTATION.

A. General.

1. All City codes, ordinances, regulations, policies, and procedures shall be amended as necessary to carry out the provisions and intent of this Ordinance.

2. All City development permit forms and processes shall be amended as necessary to carry out the provisions and intent of this Ordinance.

3. If the Administrator has not provided sufficient data, the City shall obtain, review and reasonably utilize other data in the development of regulations adequate to carry out the intent and purpose of this Ordinance.

B. Designation of The Floodplain Administrator. The City Engineer is hereby designated as the Floodplain Administrator to administer, implement, and enforce this Ordinance by granting or denying permits in accord with its provisions.

C. Duties and Responsibilities of the Floodplain Administrator. The duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

1. **Permit Review**. Review all development permits to determine:

   a. Permit requirements of this Ordinance have been satisfied, including determination of Substantial Improvement and Substantial Damage of existing Structures;

   b. All other required state and federal permits have been obtained;

   c. The site is reasonably safe from Flooding;

d. The proposed development does not adversely affect the carrying capacity of areas where Base Flood elevations have been determined but a Floodway has not been designated. This means that the cumulative effect of the proposed development when combined with all other existing and anticipated development will not increase the water surface elevation of the Base Flood more than 1 foot at any point within the City of Los Angeles; and

e. All Letters of Map Revision (LOMR's) for flood control projects are approved prior to the issuance of building permits. Building permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the Start of Construction definition.

2. A **permit** shall be obtained before any construction or other development, including Manufactured Homes, within any Special Flood Hazard Area established by this Ordinance. Application for a development permit shall be made on forms furnished by the City of Los Angeles. The applicant shall provide the following minimum information:

   a. Plans in duplicate, drawn to scale, showing:

      1. Location, dimensions, and elevation of the area in question, existing or proposed structures, storage of materials and equipment and their location;

      2. Proposed locations of water supply, sanitary sewer, and other utilities;

      3. Grading information showing existing and proposed contours, any proposed fill, and drainage facilities;

      4. Location of the regulatory Floodway when applicable;

      5. Base flood elevation information;

      6. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; and

      7. Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed, as required in this Ordinance and detailed in FEMA Technical Bulletin TB 3-93;

b. Certification from a registered civil engineer or architect that the nonresidential floodproofed building meets the floodproofing criteria;

c. For a crawl-space foundation, location and total net area of foundation openings as required in this Ordinance and detailed in FEMA Technical Bulletins 1-93 and 7-93;

d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and

e. All appropriate certifications listed in this Ordinance.

D. Development of Substantial Improvement and Substantial Damage Procedures. Procedures are established by the Floodplain Administrator and are coordinated with other departments/divisions and implemented by Floodplain Administrator and Los Angeles Department of Building and Safety staff.

E. Review, Use and Development of Other Base Flood Data. When Base Flood elevation data has not been provided in accordance with this Ordinance, the Floodplain Administrator shall obtain, review, and reasonably utilize any Base Flood elevation and Floodway data available from a federal or state agency, or other source, in order to administer this Ordinance.

NOTE: A Base Flood elevation shall be obtained using one of two methods from the FEMA publication, FEMA 265, "Managing Floodplain Development in Approximate Zone A Areas – A Guide for Obtaining and Developing Base (100-year) Flood Elevations" dated July 1995.

F. Notification of Other Agencies.

1. When 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 alteration or relocation;

   b. Submit evidence of such notification to the Federal Emergency Management Agency; and

   c. Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

2. Base Flood elevation changes due to physical alterations:

    a. Within 6 months of information becoming available or Project completion, whichever comes first, the Floodplain Administrator shall submit or assure that the permit applicant submits technical or scientific data to FEMA for a Letter of Map Revision (LOMR).

    b. All LOMR's for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "Start of Construction" definition.

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

3. Changes in corporate boundaries:

    The Floodplain Administrator shall notify FEMA in writing whenever the corporate boundaries of the City have been modified by annexation or other means and include a copy of a map of the community clearly delineating the new corporate limits.

G. **Documentation of Floodplain Development**. The Floodplain Administrator or other City designee shall obtain and maintain for public inspection and make available as needed the following:

1. Certification required by Standards of Construction for Elevation and Floodproofing and Manufactured Homes);

2. Certification required by Standards of Construction for Elevation and Floodproofing;

3. Certification required by Standards of Construction for Flood Openings;

4. Certification of elevation required by Planning Discretionary Reviews for all new Subdivisions;

5. Certification required by Standards of Construction for Floodways;

6. Information required by Standards of Construction for Coastal High Hazard Areas; and

7. Maintain a record of all Variance actions, including justification for their issuance, and report such Variances issued in its biennial report submitted to the Federal Emergency Management Agency.

H. **Map Determination**. The Floodplain Administrator shall make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazard, where there appears to be a conflict between a mapped boundary and actual field conditions. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided under Variances and Waivers.

I. **Remedial Action**. The Floodplain Administrator or other City designee shall take action to remedy violations of this Ordinance as specified in Section 4.

J. **Biennial Report**. The Floodplain Administrator shall complete and submit a Biennial Report to FEMA.

K. **Planning**. The Floodplain Administrator or other City designee assure the City of Los Angeles' General Plan is consistent with floodplain management objectives herein.

L. **City Planning**. It shall be the duty of the Director of Planning to establish, insofar as the responsibilities of the Planning Department are affected, all standards and other regulations and to propose regulations necessary to carry out the provisions of this Ordinance. The Director shall take into consideration and implement this Ordinance in all areas of the planning process including, but not limited to, the following:

1. Geographically specific plans shall include regulations implementing the policies of this Ordinance and the applicable community plan where that plan has specifically addressed flood-related hazards within the plan area.

2. Annexations. All territory annexed to the City shall first have a flood hazard study. If a flood hazard study has been completed under another jurisdiction, it shall be reviewed. If it is deficient in any way or if it is more than one year old, it shall be amended or supplemented. Both the flood hazard study and report shall be submitted to the City Council when considering the annexation.

3. Any areas subject to special flood-related hazards shall be incorporated into the City's adopted LAFHM. In addition to the flood hazard study, a report shall be prepared containing recommendations for the elimination or minimization of flood-related hazards by appropriate land uses and/or physical improvements.

M. Public Works. The Board of Public Works (Board) is the head of the Department of Public Works and responsible for the activities of the various Bureaus within the Department of Public Works. The Board may require the Bureau Directors of the appropriate Bureaus which make up the Department of Public Works to promulgate all standards and codes or other regulations necessary to carry out the provisions and intent of this Ordinance.

1. **Bureau of Engineering**.

   a. The City Engineer shall acquire or cause to be acquired all data necessary for the identification and delineation of flood hazard areas for the purposes of reporting to the Administrator in accordance with this Ordinance, and to advise the City Council of flood hazards the City Engineer recommends be delineated on the LAHFM.

   b. The City Engineer shall generate and maintain the Los Angeles Flood Hazard Map including the preparation and presentation of any and all ordinances required to establish and maintain the LAFHM.

   c. The City Engineer shall maintain, at one central location, a file of all flood, drainage and mud-related hazard information including all Waivers, findings and appeals.

   d. The City Engineer shall be responsible for precise determination of the location of the boundaries of flood-related hazard areas shown on the LAFHM and to make determinations as to whether a property or portion thereof is located within a special hazard area.

   e. The City Engineer shall assure compliance with this Ordinance in the planning, design, construction or reconstruction of all projects within the City Engineer's jurisdiction.

2. **Bureau of Sanitation**. The Director of the Bureau of Sanitation shall assure compliance with this Ordinance in the operation of:

   a. Industrial waste operations, including, but not limited to, the handling, storage, collection, transportation, and disposal of chemical waste or other hazardous materials;

   b. Refuse collection, transportation, reclamation, and disposal;

   c. Sewer and storm drain maintenance;

   d. Pumping plants; and

   e. Sewer treatment facilities.

3. **Building and Safety**. It shall be the duty of the General Manager of Building and Safety to establish, insofar as the responsibilities of the Department of Building and Safety are affected, all standards and regulations and to propose codes necessary to carry out the provisions and intent of this Ordinance relating to:

   a. New Construction and Substantial Improvements;

   b. Rehabilitation or reconstruction;

   c. Grading, including excavation and fills;

   d. Complete and thorough Flood and/or Mudflow studies as may be appropriate in keeping with the intent of this Ordinance;

   e. The granting of Certificates of Occupancy and final approval of projects; and

   f. The maintenance of records sufficient to document compliance with the intent and purpose of this Ordinance.

   g. AR Zone Duties.

      1. To use the adopted official map or legal description of those designated developed areas within Zones AR, AR/A1-30, AR/AE, AR/AH, AR/AO, or AR/A to determine if a proposed project is in a developed area.

      2. To determine the Base Flood elevation to be used for individual projects within developed areas, areas not designated as developed areas and dual zone areas.

      3. To require the applicable standards in Standards of Construction.

      4. To provide written notification to the permit applicant that the area has been designated as 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.

4. **Department of Water and Power**. It shall be the duty of the appropriate Chief Engineer of the respective systems which make up the Department of Water and Power to promulgate all standards and other regulations and to implement planning necessary to carry out the provisions and intent of this Ordinance insofar as it pertains to their respective systems including, but not limited to, the design, construction, reconstruction, and maintenance of the following:

a. Water System

1. Storage systems

2. Transmission systems

3. Treatment systems

4. Distribution systems

b. Power System

1. Generation systems

3. Transmission systems

4. Distribution systems

5. **Harbor**. It shall be the duty of the Executive Director/General Manager of the Harbor Department to establish, insofar as the responsibilities of the Harbor Department are affected, all standards and regulations and to propose codes necessary to carry out the provisions and intent of the Ordinance relating to:

a. New Construction or Substantial Improvements;

b. Rehabilitation or reconstruction; and

c. Dredging, excavation, and fills.

1. Complete and thorough Floodand Coastal High-hazard studies as may be appropriate with the intent of this Ordinance.

2. Floodproofing of functionally dependent use facilities and Variances to contend with the needs of the City for loading and unloading of cargo, ship building, ship repair, storage and manufacturing, food processing, and any other harbor functionally dependent use works.

6. **Other Departments**. At the discretion of the City Council such other City departments or agencies not mentioned above may be directed to render assistance and/or implement their own regulations and policies in the effectuation of the provisions of this Ordinance.

Sec. 7. EMERGENCIES.

Temporary remedial measures may be taken in response to an emergency caused by a sudden and unanticipated Flooding, Mudflow or coastal high-hazards when such measures are required for the immediate protection of life, property, essential services and the general health and safety of the people.

A. All emergency projects undertaken under this emergency clause shall be permitted to proceed without prior approval or approvals that would otherwise be necessary in absentia of a genuine emergency.

B. All emergency projects excepted by this section shall be deemed temporary and no vested rights are implied or granted by the City.

C. All projects which would otherwise require licenses and/or permits and which are undertaken under the emergency provisions of this section shall have the required applications filed with the appropriate agency of the City within seven working days after the emergency abates.

D. Any emergency project which remains in place after the emergency abates shall be constructed or altered to meet all applicable standards and shall be inspected to verify that all applicable standards have been met.

Sec. 8. ALTERATION OF DRAINAGE COURSES.

A. No natural or human-made drainage course shall be altered or relocated without prior notification to all adjacent communities affected or potentially affected by such alteration or relocation. Copies of such notifications shall be submitted to the State Coordinating Office (the California Department of Water Resources) and the Administrator at the same time the affected communities are notified. Evidence of such notification shall be submitted to the Federal Emergency Management Agency.

B. No natural or human-made drainage course shall be altered or relocated in any way which would diminish its Flood carrying capacity.

C. No natural or human-made drainage course shall be altered or relocated in any way not in keeping with the provisions and intent of the Ordinance.

Sec. 9. VARIANCES AND WAIVERS.

Notwithstanding any other regulations in the Zoning Code or Charter, the following provisions apply to Waivers and Variances from the requirements of this Ordinance only.

A. **Nature of Variances**.

1. The issuance of a Variance pursuant to this Ordinance is for Floodplain management purposes only. Insurance premium rates are determined by statute according to actuarial risk and will not be modified by the granting of a Variance.

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

3. It is the duty of the City of Los Angeles 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 the flood ordinance 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 Ordinance are more detailed and contain multiple provisions that must be met before a Variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a Variance are more appropriate.

B. **Condition for Variances.**

1. Generally, Variances may be issued for New Construction, substantial improvement, and other proposed new development to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the Base Flood level, providing that the procedures of this Ordinance have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the Variance increases.

2. Variances may be issued for the repair or rehabilitation of "historic structures" 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.

3. Variances shall not be issued within any mapped regulatory Floodway if any increase in Flood levels during the Base Flood discharge would result.

4. 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 Ordinance. For example, in the case of Variances to an elevation requirement, this means the City of Los Angeles 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 of Los Angeles believes will both provide relief and meet the intent of this Ordinance.

5. Any applicant to whom a Variance is granted shall be given written notice over the signature of a City official that:

    a. The issuance of a Variance to construct a structure below the Base Flood level will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage, and

    b. Such construction below the Base Flood level increases risks to life and property. A copy of the notice may be recorded by the Floodplain Administrator in the Office of the County of Los Angeles Recorder and be recorded with a covenant of the affected parcel of land.

6. The Floodplain Administrator will maintain a record of all Variance actions, including justification for their issuance, and report such Variances issued in its biennial report submitted to FEMA.

C. **Appeals.** If the applicant, or any other affected party is dissatisfied with the action of the decision maker pertaining to a Waiver, he or she may appeal such action as follows:

1. The actions of the City Engineer shall be appealed to the Board of Public Works; the actions of the General Manager of the Department of Building and Safety to the Building and Safety Commission.

2. The appeal shall be on a form prescribed therefore and shall contain in detail the basis on which the applicant is dissatisfied with the action of the decision maker and a statement as to whether the Waiver is in violation of this Ordinance or implementing regulations and, if so, how it constitutes a violation.

3. The appeal must be filed with the appropriate body within 15 days after the mailing of the determination by the decision maker. The commission or board shall hear the matter within 30 days after filing of the appeal.

4. At the appeal hearing the commission or board shall hear the testimony of the appellant, the applicant, the person rendering the decision on the Waiver and any witnesses called by such participants.

5. Within ten days after the conclusion of the hearing the commission or board shall declare its determination. It may sustain, modify, reject or overrule any determination by the decision maker. In granting or sustaining a Waiver, findings as required by this section must be adopted by the appeal body.

6. In considering requests for Variances, the Board of Public Works and the Building and Safety Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this Ordinance, and the:

   a. Danger that materials may be swept onto other lands to the injury of others;

   b. Danger of life and property due to Flooding or erosion damage;

   c. 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;

   d. Importance of the services provided by the proposed facility to the community;

   e. Necessity to the facility of a waterfront location, where applicable;

   f. Availability of alternative locations for the proposed use which are not subject to Flooding or erosion damage;

   g. Compatibility of the proposed use with existing and anticipated development;

   h. Relationship of the proposed use to the comprehensive plan and Floodplain management program for that area;

   i. Safety of access to the property in time of Flood for ordinary and emergency vehicles;

   j. Expected heights, velocity, duration, rate of rise, and sediment transport of the Flood waters expected at the site; and

   k. Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water system, and streets

and bridges.

7. Variances shall only be issued upon a:

   a. Showing of good and sufficient cause;

   b. Determination that failure to grant the Variance would result in exceptional "hardship" to the applicant; and

   c. Determination that the granting of a Variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create a nuisance (see "Public safety and nuisance"), cause "fraud and victimization" of the public, or conflict with existing local laws or ordinances.

8. 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 the Appeals section of this Ordinance 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.

9. Upon consideration of the factors of the Conditions for Variances and the purposes of this Ordinance, the City of Los Angeles may attach such conditions to the granting of Variances as it deems necessary to further the purposes of this Ordinance.

D. **Responsibilities.**

1. The City Engineer for the Department of Public Works and the General Manager of the Department of Building and Safety or their designees, may grant Variances and Waivers from the requirements of this Ordinance.

2. The authority to grant Variances and Waivers shall be delegated as follows:

   a. The City Engineer - design and construction of Public Works;

   b. General Manager, Department of Building and Safety - construction of private structures and grading on private property; and

   c. The Flood Hazard Mitigation Coordinator shall be notified of all requests for Variances and Waivers.

E. **Procedures**.

1. An application for a Waiver shall be filed with the appropriate City office of authorized to grant Waivers upon a form and accompanied by such data and information as has been prescribed for that purpose. Each application shall be verified by the owner or lessee of the property concerned and accompanied by the fee set forth in Los Angeles Municipal Code Section 91.107.

2. Upon the filing of a verified application for Waiver, the matter shall be set for public hearing before the City official authorized to grant Variances. Notice of the time, place and purpose of the public hearing shall be mailed not less than ten days prior to the date of such hearing to the applicant and to the owners of property within 300 feet of the subject property. The names and addresses of owners of property located within the City shall be determined by reference to the records of the City Clerk, and for property outside the City from records of the County Assessor. The decision maker authorized to grant Variances shall investigate each such application as expeditiously as possible and render a decision thereon within 75 days from the date the completed application is accepted for filing.

3. The determination of the decision maker shall be in writing and shall be supported by findings of fact based on evidence presented to the decision maker. The decision maker may attach such conditions to the grant of a Waiver as he or she deems necessary to further the purposes of this Ordinance. A copy of the determination of the decision maker together with notification that: (a) issuance of a Waiver to construct a structure below the Base Flood level will result in increased premium rates for insurance coverage; and (b) such construction below the Base Flood Level increases risk to life and property shall be mailed to the applicant. Copies of a determination approving a Waiver shall be sent to the Flood Administrator and the Flood Hazard Mitigation Coordinator for the City, as that role is described in Section 11 of this Ordinance.

Sec. 10. REVISIONS.

A. Amendments or revisions to this Ordinance may be initiated by the City Council, the Director of Planning, or the City Planning Commission.

B. The City Engineer and/or Director of Planning shall review changes in applicable Federal regulations and, as necessary, report and make recommendations to the City Council.

Sec.11. CITYWIDE FLOOD HAZARD COORDINATION AND REPORTING.

A. Coordinating.

1. The City Administrative Officer is designated as liaison between the City and FEMA and other Federal, State, regional and local agencies. Flood-related disaster relief activities shall be coordinated through this office.

2. The City Engineer is designated as the Flood Hazard Mitigation Coordinator for the City. The Flood Hazard Mitigation Coordinator shall be responsible for coordinating the implementation of this Ordinance among the Planning, Building and Safety, and Public Works Departments. He or she shall submit all reports required by Federal regulations and/or this Ordinance in accordance with procedures set forth below.

3. All affected divisions of the Emergency Operations Organization shall cooperate with and assist the above-designated officials. The Citywide Flood Hazard Coordination Program will be the responsibility of the Emergency Operations Board.

   Under Los Angeles Administrative Code Section 8.41, the Board is responsible for preparation for and response to emergency situations within the City. The Board is composed of department managers who are primarily involved in various aspects of the flood hazards program.

B. Reporting.

1. The Flood Hazard Mitigation Coordinator shall be responsible for the required notification to the Administrator and the State and regional clearinghouses of Waivers from the Ordinance. Each department shall submit copies of each Waiver, its findings and supporting justifications to the Flood Hazard Mitigation Coordinator.

2. Annually, each affected department shall submit a summary report of: (a) the number of permits approved in Special Flood Hazard Areas; (b) the number of Waivers applied for; (c) the number of Waivers approved; and (d) any other data requested by the Flood Hazard Mitigation Coordinator. These Departmental reports shall be received by the Flood Hazard Mitigation Coordinator in sufficient time for him or her to make his/her annual or biennial Summary Report to the Administrator.

3. The Flood Hazard Mitigation Coordinator shall submit an annual or biennial Summary Report to the Administrator in the form and including such information as is required by federal regulations or as requested by the Administrator.

4. The Flood Hazard Mitigation Coordinator shall be responsible for notifications of intent to change or alter drainage courses.

5. The Flood Hazard Mitigation Coordinator shall submit to the Administrator, as often as necessary, requests for revision to the federally regulated components (FIRM and FBFM) of the Los Angeles Flood Hazard Map. The Flood Hazard Mitigation Coordinator shall submit updated map data to the Bureau of Engineering and Department of City Planning automated mapping systems on an annual basis, at minimum, or upon updates to the map.

6. The Flood Hazard Mitigation Coordinator shall notify the Administrator, upon occurrence, whenever the boundaries of the City have been modified by annexation or when the City has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.

Sec. 12. SEVERABILITY. If any portion, subsection, sentence, clause or phrase of this ordinance is for any reason held by a court of competent jurisdiction to be invalid, such a decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance and each portion or subsection, sentence, clause and phrase herein, irrespective of the fact that any one or more portions, subsections, sentences, clauses or phrases be declared invalid.

Sec. 13. PROGRAMS. These programs are suggested for possible future study and their inclusion in this Ordinance does not imply either a rigid methodology or any budgetary obligation on the part of the City. Each program must be individually authorized and funded by the City Council and their inclusion here does not obligate the City of Los Angeles to their implementation.

Recommended are:

A. Initiation of a program for the relocation of occupants away from Flood-Related Hazard Areas wherein human life, safety and health is endangered as follows:

   1. Examination of the inventory of vacant properties owned by the City for initiation of a program to study the relationship between fire and Flood-Related Hazards;

   2. An equitable arrangement of exchange for property rights to be acquired within Floodways;

   3. Preservation of the Flood-prone Areas for open space purposes;

4. Acquisition, where feasible, of land or land development rights for public purposes consistent with a policy of minimization of future property losses;

5. Acquisition of frequently Flood-damaged structures.

B. Designation of the City's Automated Mapping System as the replacement for the present district maps and accelerate its implementation by:

1. Increasing the present capability of the Bureau of Engineering to construct the computerized base map;

2. Allocation of staff positions for each department to transfer its district map data items onto the Automated Mapping System;

3. Acquisition of the remote terminals for the public counters of the central and district offices as required.

C. Initiation of a program to study the relationship between fire and Flood-Related Hazards by:

1. Taking into account that the native vegetation (particularly the climax vegetation) which covers hillside areas is extremely flammable and that brush fires in such areas are frequently followed by Floods and Mudflows;

2. Studying the complex interplay between drought, fire, heavy rain and Mudflow so as to be better able to identify potentially hazardous situations;

3. Establishing plans and procedures aimed at minimizing such hazards and preventing the possible disasters they may cause.

D. Initiation of a program for the purpose of assessing Coastal High-Hazards for the purpose of establishing coastal development criteria, including preventive and remedial measures, for the protection of human life and property by:

1. Completing a bathymetric study to chart the ocean floor in sufficient detail (including topography and depths) to permit engineering calculations to be made concerning hypothetical tsunami and hurricane wave behavior and coastal impacts;

2. Studying the inter-relationships between: (a) type of origin (i.e., earthquake or hurricane); (b) strength of origins (i.e., magnitude of earthquake or strength of winds); (c) directional orientation of origin (i.e., is it aimed directly at us; the directness of path); (d) distance from origin; (e) travel-time between origin and point of coastal impact; (f) degeneration factor (i.e., diminution of strength over distance and time); (g) bathymetry of our coastal shelf; (h) shoaling effect; and (i) coastal landforms and

landward barriers or features, so as to be able to identify hazardous situations and to be able to forecast problem areas;

3. Investigating means to mitigate impacts of Coastal High-hazards on human life, safety and welfare, such as: (a) construction of submarine barriers to "trip" incoming waves; (b) construction of shore works; (c) prohibition of new habitable development on or near unprotected coast frontage; and (d) relocation of habitable development and/or vital public facilities away from coastal frontages which are unfeasible to protect;

4. Developing early warning and emergency preparedness plans, including evacuation, temporary relocation alternatives, disaster relief centers and adequate contingencies for policing the area.

E. Initiation of a program to prevent Mudflows, erosion and Floods including, but not limited to:

1. Inspection of Flood control and drainage facilities on private property to recommend clearing or cleaning of Debris and/or construction of new facilities;

2. Strengthen the brush clearance ordinance and enforcement to prevent brush fires and concomitant erosion problems;

3. Promote the use of low fuel volume and erosion control landscaping through public education and displays;

4. Provide intensive slope rehabilitation after brush fires, including grading and planting with barley and other stiff, deep rooting grasses.

Sec. 14. URGENCY CLAUSE. The City finds and declares that this Ordinance is required for the immediate protection of the public peace, health, and safety for the following reasons: Adoption of this Ordinance is a prerequisite for continued eligibility of property in the City of Los Angeles for federal flood insurance and federal disaster assistance monies. So that federal flood insurance will continue to be available for City of Los Angeles property owners, it is imperative that this Ordinance be made effective prior to April 21, 2021. For these reasons, this Ordinance shall become effective upon publication pursuant to Section 253 of the Los Angeles City Charter.

Sec. 15. The City Clerk shall certify to the passage of this ordinance and have it published in accordance with Council policy, either in a daily newspaper circulated in the City of Los Angeles or by posting for ten days in three public places in the City of Los Angeles: one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall; one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall East; and one copy on the bulletin board located at the Temple Street entrance to the Los Angeles County Hall of Records.

Approved as to Form and Legality

MICHAEL N. FEUER, City Attorney

By _____
ADRIENNE S. KHORASANEE
Deputy City Attorney

Date 4/8/21

Pursuant to Charter Section 559, I **approve** this ordinance on behalf of the City Planning Commission and recommend that it be adopted.

_____
VINCENT P. BERTONI, AICP
Director of Planning

Date April 7, 2021

File No. 21-0346

m:\real prop_env_land use\land use\adrienne khorasanee\ordinances\flood hazard management ordinance 2021\draft flood hazard management ordinance 2021.docx[Document file path]

The Clerk of the City of Los Angeles hereby certifies that the foregoing ordinance was passed by the Council of the City of Los Angeles, **by a vote of not less than three-fourths** of all its members.

CITY CLERK

MAYOR

Ordinance Passed April 14, 2021

Approved 04/14/2021

Published Date: 04-19-21
Ordinance Effective Date: 04-19-21