ORDINANCE NO. _____

AN ORDINANCE CONCERNING FLOOD HAZARD AREAS AND AMENDING SECTIONS 9.0500; 9.6705, 9.6706, 9.6707, 9.6708 AND 9.6709 OF THE EUGENE CODE, 1971, AND PROVIDING AN EFFECTIVE DATE.

The City Council of the City of Eugene finds as follows:

A. The State of Oregon has in ORS 197.175 delegated the responsibility to local governmental unit to adopt floodplain management regulations designated to promote the public health, safety, and general welfare of its citizenry.

B. The flood hazard areas in the City of Eugene are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

C. These flood losses may be caused by the cumulative effect of obstruction in special flood hazard areas which increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protects from flood damage also contribute to flood loss.

D. The purpose of this ordinance is to promote public health, safety and general welfare, and to minimize public and private losses due to flooding in flood hazard areas by provisions designed to:

(1) Protect human life and health.

(2) Minimize expenditure of public money for costly flood control projects.

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.

(4) Minimize prolonged business interruptions.

(5) Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in special flood hazard areas.

(6) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding.

(7) Notify potential buyers that property is in a special flood hazard area.

(8) Notify those who occupy special flood hazard areas that they assume responsibility for their actions.

E. In order to accomplish its purpose, this ordinance sets out methods and provisions for:

(1) Restricting or prohibiting development which is dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
(2) Requiring that development vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
(3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
(4) Controlling filling, grading, dredging, and other development which may increase flood damage; and
(5) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.

F. ORS 455 establishes that local governments must administer and enforce the State of Oregon Specialty Codes and the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood hazard areas. Therefore, this ordinance is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.

The City of Eugene ordains as follows:

Section 1. The definitions codified at Section 9.0500 of the Eugene Code, as adopted or revised by this ordinance, also apply to the uncodified provisions of this ordinance.

Section 2. Duties and Responsibilities of the Floodplain Administrator. The City Manager, and the City Manager's designee, shall administer, implement and enforce the provisions of Eugene Code (EC) Sections 9.6706 – 9.6709 through the approval or denial of development permits in accordance with those code sections as they are hereby adopted or later amended, and the uncodified provisions of this Ordinance. This includes, but is not limited to:

(a) reviewing all development permit applications to determine whether the permit requirements of sections EC 9.6705 to 9.6709 have been satisfied;

(b) reviewing all development permit applications to determine whether all other required local, state, and federal permits have been obtained and approved;

(c) reviewing all development permit applications to determine whether the proposed development is located in a floodway and, if located in the floodway, assuring that the floodway requirements of EC 9.6707(2)(d) are satisfied;

(d) reviewing all development permit applications to determine whether the proposed development is located in an area where Base Flood Elevation (BFE) data is available either through the Flood Insurance Study (FIS) or from another authoritative source and, if BFE data is not available, then ensuring compliance with the provision EC 9.6707(1)(g);

(e) reviewing all development permit applications and, where applicable, providing to building officials the Base Flood Elevation (BFE) and freeboard applicable to any proposed building requiring a development permit.

(f) reviewing all development permit applications to determine whether the proposed development qualifies as a substantial improvement as defined in EC 9.0500;

(g) reviewing all development permit applications to determine whether the proposed development activity is a watercourse alteration and, if a watercourse alteration is proposed, ensure compliance with the provisions of EC 9.6707(1)(a); and

(h) reviewing all development permit applications to determine whether the proposed development activity includes the placement of fill or excavation.

Section 3. Information to be Obtained and Maintained. The City Manager or their designee shall obtain and maintain information as necessary to carry out the purposes of this Ordinance and shall make such information available for public inspection as needed, as follows:

(a) Obtain, record, and maintain the actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where Base Flood Elevation (BFE) data is provided through the Flood Insurance Study (FIS), Flood Insurance Rate Map (FIRM), or obtained in accordance with EC 9.6707(1)(g).

(b) Obtain and record the elevation (in relation to mean sea level) of the natural grade of the building site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of EC 9.6707(2)(d) and all other required local, state, and federal permits have been obtained, approved and are adhered to.

(c) Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, obtain documentation, prepared and sealed by a professional licensed surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement).

(d) Where base flood elevation data are utilized, obtain As-built certification of the elevation (in relation to mean sea level) of the lowest floor (including basement) prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection.

(e) Maintain all Elevation Certificates (EC) submitted to the City;

(f) Obtain, record, and maintain the elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this ordinance and where Base Flood Elevation (BFE) data is provided through the FIS, FIRM, or obtained in accordance with EC 9.6707(1)(g).

(g) Maintain all floodproofing certificates required under this ordinance;

(h) Record and maintain all variance actions, notices of variance, and the justification for their issuance as described at EC 9.6709;

(i) Obtain and maintain all hydrologic and hydraulic analyses performed as required under EC 9.6707(2)(c).

(j) Record and maintain all Substantial Improvement and Substantial Damage calculations and determinations required under EC 9.6708(1) and (2), keeping a record of SI calculations within permit files.

(k) Maintain for public inspection all records pertaining to the provisions of this ordinance.

Section 4. Community Boundary Alterations. The City Manager or their designee shall notify the Federal Insurance Administrator in writing whenever the City limits have been modified by annexation or the City has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the City's boundaries. Include within such notification a copy of a map of the City suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

Section 5. Requirement to Submit New Technical Data. When physical changes affecting flooding conditions cause the City's base flood elevations to increase or decrease, as soon as practicable, but not later than six months after the date such information becomes available, the City Manager or their designee shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Title 44 of the Code of Federal Regulations (CFR), Section 65.3 or require the applicant to submit such data through the applicable FEMA Letter of Map Change (LOMC) process. The Floodplain Administrator shall

require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:

(a) Proposed floodway encroachments that increase the base flood elevation; and

(b) Proposed development which increases the base flood elevation by more than one (1) foot in areas where FEMA has provided base flood elevations but no floodway.

An applicant shall notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

Section 6. Section 9.0500 of the Eugene Code, 1971, is amended to add the following definitions in alphabetical order:

Appeal. As used in EC 9.6705 to 9.6709, a request for a review of the interpretation of any provision of this section or a request for a variance.

Area of shallow flooding. As used in EC 9.6705 to 9.6709, Aa designated Zone AO, AH, AR/AO or AR/AH on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of Special Flood Hazard. As used in EC 9.6705 to 9.6709, the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR. "Special flood hazard area" is synonymous in meaning and definition with the phrase "area of special flood hazard."

Base flood elevation (BFE). As used in EC 9.6705 to 9.6709, the elevation to which floodwater is anticipated to rise during the base flood.

Basement: As used in EC 9.6705 to 9.6709, any area of the building having its floor subgrade (below ground level) on all sides.

Flood elevation study. As used in EC 9.6705 to 9.6709, see "Flood Insurance Study."

Flood proofing. As used in EC 9.6705 to 9.6709, any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.

Functionally dependent use. As used in EC 9.6705 to 9.6709, a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading

of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.

Highest adjacent grade. As used in EC 9.6705 to 9.6709, the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure. As used in EC 9.6705 to 9.6709, 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:
    a. By an approved state program as determined by the Secretary of the Interior or
    b. Directly by the Secretary of the Interior in states without approved programs.

Letter of Map Change (LOMC). As used in sections 9.6705 to 9.6709, an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. The following are categories of LOMCs

1. Conditional Letter of Map Amendment (CLOMA). A CLOMA is FEMA's comment on a proposed structure or group of structures that would, upon construction, be located on existing natural ground above the base (1-percent-annual-chance) flood elevation on a portion of a legally defined parcel of land that is partially inundated by the base flood.
2. Conditional Letter of Map Revision (CLOMR). A CLOMR is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the special flood hazard area.
3. Conditional Letter of Map Revision based on Fill (CLOMR-F). A CLOMR-F is FEMA's comment on a proposed project that would, upon construction, result in a modification of the special flood hazard area through the placement of fill outside the existing regulatory floodway.
4. Letter of Map Amendment (LOMA). An official amendment, by letter, to the Flood Insurance Rate Maps (FIRMs) based on technical data showing that an existing structure, parcel of land or portion of a parcel of land that is naturally high ground, (i.e., has not been elevated by fill) above the base flood, that was inadvertently included in the special flood hazard area.

5. Letter of Map Revision (LOMR). A LOMR is FEMA's modification to an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the SFHA. The LOMR officially revises the FIRM or FBFM, and sometimes the Flood Insurance Study (FIS) report, and, when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report.
6. Letter of Map Revision based on Fill (LOMR-F). A LOMR-F is FEMA's modification of the special flood hazard area shown on the Flood Insurance Rate Map (FIRM) based on the placement of fill outside the existing regulatory floodway.
7. A PMR is FEMA's physical revision and republication of an effective Flood Insurance Rate Map (FIRM) or Flood Insurance Study (FIS) report. PMRs are generally based on physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the special flood hazard area.

Lowest floor. As used in EC 9.6705 to 9.6709, 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 not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance. Manufactured dwelling: A structure, transportable in one or more sections, w

Mean sea level. As used in EC 9.6705 to 9.6709, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

New construction. As used in EC 9.6705 to 9.6709, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted into this code and includes any subsequent improvements to such structures.

Special flood hazard area. As used in EC 9.6705 to 9.6709, see "Area of special flood hazard" for this definition.

Substantial damage. As used in EC 9.6705 to 9.6709, 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.

Violation. As used in EC 9.6705 to 9.6709, the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of

compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Section 7. Section 9.0500 of the Eugene Code, 1971, is further amended to revise the following definitions as shown:

Base Flood. As used in sections 9.6705 to 9.6709, the flood having a one percent chance of being equaled or exceeded in any given year. ~~Also referred to as the "100-year flood." Designation on maps always includes the letters A or V.~~

Development.

1. The act, process or result of developing.
2. As used in sections 9.6705 to 9.6709, any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials ~~located within the area of special flood hazard~~.

Flood or Flooding. As used in sections 9.6705 to 9.6709:

(1) ~~a~~A general and temporary condition of partial or complete inundation of normally dry land areas from:

~~(A)~~a. The overflow of inland or tidal waters; ~~or~~

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

c. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1) of this definition.

Flood Insurance Rate Map (FIRM). As used in sections 9.6705 to 9.6709, the official map on which the Federal Insurance Administrat~~ion~~or has delineated both the special hazard areas ~~of special flood hazards~~ and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood Insurance Study (FIS). As used in sections 9.6705 to 9.6709, an examination, evaluation and determination of flood hazards and, if appropriate, corresponding ~~the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the~~ water surface elevations, or an examination and

determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards ~~of the base flood~~.

Floodway. As used in sections 9.6705 to 9.6709, ~~T~~the channel of a river or other watercourse and the adjacent land areas ~~designated as a floodway by the Federal Emergency Management Agency~~ that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as "Regulatory Floodway."

Manufactured Home/Manufactured Dwelling.

1. A ~~"manufactured home" is a~~ structure constructed for movement on the public highways that has sleeping, cooking and plumbing facilities, that is intended for human occupancy, that is being used for residential purposes and that was constructed in accordance with federal manufactured housing construction and safety standards and regulations in effect at the time of construction. A "manufactured dwelling" includes a residential trailer, a structure constructed for movement on the public highways that has sleeping, cooking and plumbing facilities, that is intended for human occupancy, that is being used for residential purposes and was constructed before January 1, 1962, a mobile home meeting the above requirements that was constructed between January 1, 1962 and June 15, 1976 and met the construction requirements of Oregon mobile home law in effect at the time of construction, and a manufactured home meeting the above requirements. "Manufactured dwelling" does not mean any building or structure constructed to conform to the State of Oregon Structural Specialty Code or the One and Two Family Dwelling Code adopted pursuant to ORS 455.100 to 455.450 and 455.610 to 455.630 or any unit identified as a recreational vehicle by the manufacturer. A manufactured home accessory building or structure includes~~:~~ ~~(A) A~~a any portable, demountable or permanent structure established for use of the occupant of the manufactured structure and as further defined by rule of the Director of the State Department of Consumer and Business Services.

2. As used in sections 9.6705 to 9.6709: a structure, transportable in one or more sections, which is built on a permanent chassis and designed for use with ~~or without~~ a permanent foundation when attached to the required utilities. The term "manufactured dwelling" does not include a "recreational vehicle" and is synonymous with "manufactured home".

Manufactured Home/Dwelling Park.

~~1. Any place where 4 or more manufactured dwellings are located within 500 feet of one another on a lot, tract or parcel of land under the same ownership, the primary purpose of which is to rent or lease space or keep space for rent or lease to any person~~

~~for a charge or fee paid or to be paid for the rental or lease or use of facilities or to offer space free in connection with securing the trade or patronage of such person. "Manufactured dwelling park" does not include a lot or lots located within a subdivision being rented or leased for occupancy by no more than 1 manufactured dwelling per lot if the subdivision underlying land division was approved by the city.~~

1. Any place where 4 or more manufactured dwellings are located within 500 feet of one another on a lot, tract or parcel of land under the same ownership, the primary purpose of which is to rent or lease space or keep space for rent or lease to any person for a charge or fee paid or to be paid for the rental or lease or use of facilities or to offer space free in connection with securing the trade or patronage of such person. "Manufactured dwelling park" does not include a lot or lots located within a subdivision being rented or leased for occupancy by no more than 1 manufactured dwelling per lot if the subdivision was approved by the city. "Manufactured dwelling park" also does not include a development permitted as a fourplex or a cottage cluster.

2. As used in sections 9.6705 to 9.6709, "Manufactured dwelling park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured dwelling lots for rent or sale.

Recreational Vehicle.

1. A vehicle with or without motive power that is designed for human occupancy and to be used temporarily for recreational, seasonal or emergency purposes, and that has a gross floor area not to exceed 400 square feet in set up mode.
2. As used in sections 9.6705 to 9.6709, a vehicle which is:
   a. Built on a single chassis;
   b. 400 square feet or less when measured at the largest horizontal projection;
   c. Designed to be self-propelled or permanently towable by a light duty truck; and
   e. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Start of Construction. As used in sections 9.6705 to 9.6709, includes substantial improvement and means ~~T~~the date the development permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days ~~of~~from the permit ~~date~~. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab~~s~~ or footings, the installation of pil~~ing~~es, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured ~~home~~dwelling on a foundation. Permanent construction does not include land preparation, such as clearing, grading, ~~or~~and filling; nor does it include the installation of streets and/or walkways; nor does it include the installation

~~excavation for a basement, footings, piers or foundations, or erection of temporary forms; nor the installation~~ on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not ~~as~~ part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure.

1. Anything constructed or built, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.
2. As used in sections 9.6705 to 9.6709, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured dwelling.

Substantial Improvement. As used in sections 9.6705 to 9.6709, any ~~repair,~~ 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 ~~either: (A)~~ Bbefore the "start of construction" of the improvement ~~or repair is started, or~~

~~(B) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure~~. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

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

~~(D)~~2. Any alteration of a ~~structure listed on the National Register of Historic Places or a State Inventory of Historic Places~~ "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Section 8. Sections 9.6705 of the Eugene Code, 1971, is deleted in its entirety and is replaced with the following:

9.6705 Development in Floodplains – General.

(1) The special flood hazard areas identified by the Federal Insurance Administration in the scientific and engineering report entitled "The Flood Insurance Study (FIS) for Lane County and Incorporated Areas Volumes 1-4," dated June 5, 2020, with accompanying Flood Insurance Rate Maps (FIRMs) Panels 0619 through 1650 are hereby adopted by reference

and declared to be a part of this code. The Flood Insurance Study (FIS) and FIRM panels are on file at City of Eugene Public Works Engineering offices.

(2) Compliance. All development within special flood hazard areas is subject to the terms of EC 9.6705-9.6709 and required to comply with its provisions and all other applicable regulations.

Section 9. Sections 9.6706 of the Eugene Code, 1971, is deleted in its entirety and is replaced with the following:

9.6706 Development in Floodplains – Development Permit.

(1) **Permit Required.** A development permit shall be obtained before construction or development begins within any area of special flood hazard established in section 9.6705. The permit shall be for all structures including manufactured homes as defined in this land use code, and for all other development including fill and other activities, as also defined in section 9.0500.

(2) **Application.** Application for a development permit within an area of special flood hazard shall be made on forms furnished by the City and may include but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. In addition to material referenced in EC 9.6707, the following information is specifically required:

(a) In riverine flood zones, the proposed elevation (in relation to mean sea level), of the lowest floor (including basement) and all attendant utilities of all new and substantially improved structures.

(b) The proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed.

(c) Certification by a registered professional engineer or architect licensed in the State of Oregon that the floodproofing methods proposed for any non-residential structure meet the floodproofing criteria for non-residential structures in EC 9.6707(2)(c)3.

(d) A description of the extent to which any watercourse will be altered or relocated.

(e) Base Flood Elevation data for land division applications or other development when required per EC 9.6707(1)(f).

(f) The substantial improvement calculation for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure.

(g) The amount and location of any fill or excavation activities proposed.

(h) A Conditional Letter of Map Revision (CLOMR) for any:

1. Proposed floodway encroachments that increase the base flood elevation; or
2. Proposed development which increases the base flood elevation by more than one (1) foot in areas where FEMA has provided base flood elevations but no floodway.

Section 10. Sections 9.6707 of the Eugene Code, 1971, is deleted in its entirety and is replaced with the following:

9.6707 Development in Floodplains – Provisions for Flood Hazard Reduction

(1) General Standards. In all special flood hazard areas, the following standards shall be adhered to:

(a) Alteration of Watercourses.

1. The flood carrying capacity within the altered or relocated portion of said watercourse shall be maintained.
2. Maintenance shall be provided within the altered or relocated portion of said watercourse to ensure that the flood carrying capacity is not diminished.
3. Prior to any alteration or relocation of a watercourse:

   a. The City Manager or their designee shall notify adjacent communities, the Department of Land Conservation and Development, and other appropriate state and federal agencies and submit evidence of such notification to the Federal Insurance Administration.

   b. The applicant shall notify the Federal Insurance Administration by transmitting a Letter of Map Revision (LOMR) along with either:

      i. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or

      ii. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

4. When required under EC 9.6706(2)(h), the applicant shall submit a Conditional Letter of Map Revision (CLOMR).

(b) Anchoring.

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

2. All manufactured dwellings shall be anchored per section EC 9.6707(2)(c)4.

(c) Construction Materials and Methods.

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(d) Utilities and Equipment.

1. Water Supply, Sanitary Sewer, and On-Site Waste Disposal Systems.

   a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

   b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

   c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.

2. Electrical, Mechanical, Plumbing and Other Equipment.
   a. Except as provided in b., below, electrical, heating, ventilation, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated a minimum of one (1) foot above the Base Flood Elevation.
   b. The requirement set out in a., above, does not apply to service equipment (including but not limited to electrical systems, equipment and components; heating, ventilation, air conditioning; plumbing appliances and plumbing fixtures; and duct systems) that is:
      i. Specially designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to one (1) foot above the Base Flood Elevation; and
      ii. Not electrical, heating, ventilation, air-conditioning, plumbing, duct systems, and other equipment and service facilities being installed as part of a substantial improvement.

(e) Tanks.

1. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.

2. Above-ground tanks shall be installed at or above the base flood level or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.

(f) Land division Proposals.

1. All new land division proposals and other proposed new developments (including proposals for manufactured dwelling parks and land divisions) greater than 50 lots or 5 acres, whichever is the lesser, shall include within such proposals, Base Flood Elevation data.

2. All new land division proposals and other proposed new developments (including proposals for manufactured dwelling parks and land divisions) shall:

   a. Be consistent with the need to minimize flood damage.

   b. Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.

   c. Have adequate drainage provided to reduce exposure to flood hazards.

(g) Use of Other Base Flood Elevation Data.

1. When Base Flood Elevation data has not been provided in accordance with section EC 9.6705(2), the City Manager or designee shall obtain, review, and reasonably utilize any Base Flood Elevation data available from a federal, state, or other source, in order to administer EC 9.6707. All new land division proposals and other proposed new developments (including proposals for manufactured dwelling parks and land divisions) must meet the requirements of EC 9.6707(1)(f).

2. Base Flood Elevations shall be determined for development proposals that are 5 acres or more in size or are 50 lots or more, whichever is lesser in any A zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding; the test of reasonableness includes use of historical data, high water marks, FEMA provided Base Level Engineering data, and photographs of past flooding, etc. When no base flood elevation data is available, the reasonably safe elevation requirement for development proposals with an elevation requirement, within a riverine unnumbered a zone, is at least two (2) feet above the highest adjacent grade. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.

(h) Structures Located in Multiple or Partial Flood Zones. In coordination with the State of Oregon Specialty Codes:

1. When a structure is located in multiple flood zones on the community's Flood Insurance Rate Maps (FIRM) the provisions for the more restrictive flood zone shall apply.

2. When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.

(2) Specific Standards. These specific standards shall apply to all new construction and substantial improvements in addition to the General Standards contained in EC 9.6707(1).

(a) Flood Openings. All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the Base Flood Elevation, including crawl spaces shall:

1. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exist of floodwaters;

2. Be used solely for parking, storage, or building access;

3. Be certified by a registered professional engineer or architect or meet or exceed all of the following minimum criteria:

a. There shall be a minimum of two openings;

b. The total net area of non-engineered openings shall be not less than one (1) square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosure walls;

c. The bottom of all openings shall be no higher than one (1) foot above grade;

d. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area; and

e. All additional higher standards for flood openings in the State of Oregon Residential Specialty Code shall be complied with when applicable.

(b) Garages.

1. Attached garages may be constructed with the garage floor slab below the Base Flood Elevation (BFE) in riverine flood zones, if the following requirements are met:

a. If located within a floodway the proposed garage shall comply with the requirements of EC 9.6707(2)(d);

b. The floors shall be at or above grade on not less than one side;

c. The garage shall be used solely for parking, building access, and/or storage;

d. The garage shall be constructed with flood openings in compliance with EC 9.6707(2)(a) to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater;

e. The portions of the garage constructed below the BFE shall be constructed with materials resistant to flood damage;

f. The garage shall be constructed in compliance with the standards in EC 9.6707(1); and

g. The garage shall be constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

2. Detached garages must be constructed in compliance with the standards for appurtenant structures in EC 9.6707(2)(c)6 or non-residential structures in EC 9.6707(2)(c)3, depending on the square footage of the garage.

(c) For Riverine Special Flood Hazard Areas with Base Flood Elevations. In addition to the general standards listed in EC 9.6707(1) the following specific standards shall apply in Riverine special flood hazard areas with Base Flood Elevations (BFE).

1. Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's Flood Insurance Rate Map (FIRM), unless it is demonstrated through hydrologic and hydraulic analyses, performed in accordance with standard engineering practice, 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 one (1) foot at any point within the community.

2. Residential Construction.

a. New construction, conversion to, and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of one (1) foot above the Base Flood Elevation (BFE). When no base flood elevation data is available, the reasonably safe elevation requirement for

development proposals with an elevation requirement, within a riverine unnumbered a zone, is at least two (2) feet above the highest adjacent grade.

b. Enclosed areas below the lowest floor shall comply with the flood opening requirements in EC 9.6707(2)(a).

3. Non-Residential Construction.

a. New construction, conversion to, and substantial improvement of any commercial, industrial, or other non-residential structure shall:

i. have the lowest floor, including basement elevated at or above the Base Flood Elevation (BFE) or, when no base flood elevation data is available, the reasonably safe elevation requirement for development proposals with an elevation requirement, within a riverine unnumbered A zone, is at least two (2) feet above the highest adjacent grade; or

ii. together with attendant utility and sanitary facilities:

- Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water; and

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

- Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this section based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the City.

b. Non-residential structures that are elevated, not floodproofed, shall comply with the standards for enclosed areas below the lowest floor in EC 9.6707(2)(a).

c. Applicants floodproofing non-residential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g. a building floodproofed to the base flood level will be rated as one (1) foot below.

4. Manufactured Dwellings.

a. Manufactured dwellings to be placed (new or replacement) or substantially improved that are supported on solid foundation walls shall be constructed with flood openings that comply with EC 9.6707(2)(a);

b. The bottom of the longitudinal chassis frame beam shall be at minimum one (1) foot above Base Flood Elevation;

c. Manufactured dwellings to be placed (new or replacement) or substantially improved shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors and;

d. Electrical crossover connections shall be a minimum of twelve (12) inches above Base Flood Elevation (BFE).

5. Recreational Vehicles. Recreational vehicles placed on sites are required to:

a. Be on the site for fewer than 180 consecutive days, and

b. Be either:

i. fully licensed and ready for highway use, 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

ii. Meet the requirements of EC 9.6707(2)(c)4, including the anchoring and elevation requirements for manufactured dwellings.

6. Appurtenant (Accessory) Structures. Relief from elevation or floodproofing requirements for residential and non-residential structures in Riverine flood zones may be granted for appurtenant structures that meet the following requirements:

a. Appurtenant structures located partially or entirely within the floodway shall comply with requirements for development within a floodway found in EC 9.6707(2)(d);

b. Appurtenant structures shall only be used for parking, access, and/or storage and shall not be used for human habitation;

c. In compliance with State of Oregon Specialty Codes, appurtenant structures on properties within the special flood hazard area shall be limited to one-story structures less than 600 square feet in size;

d. The portions of the appurtenant structure located below the Base Flood Elevation shall be built using flood resistant materials;

e. The appurtenant structure shall be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;

f. The appurtenant structure shall be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in EC 9.6707(2)(a);

g. Appurtenant structures shall be located and constructed to have low damage potential;

h. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed incompliance with EC 9.6707(1)(e); and

i. Appurtenant structures shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

(d) Floodways. Located within the special flood hazard areas established in EC 9.6705 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of the floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

1. Encroachments, including fill, new construction, substantial improvements, and other development are prohibited within the adopted regulatory floodway unless:

   a. Certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge; or

   b. A Conditional Letter of Map Revision (CLOMR) is applied for and approved by the Federal Insurance Administrator, and the requirements for such revision as established under Volume 44 of the Code of Federal Regulations, section 65.12 are fulfilled.

2. If the requirements of EC 9.6707(2)(d)1 are satisfied, all new construction, substantial improvements, and other development shall comply with all other applicable flood hazard reduction provisions of EC 9.6707.

(e) Standards for Shallow Flooding Areas. Shallow flooding areas appear on FIRMs as AO zones with depth designations or as AH zones with Base Flood Elevations. For AO zones the base flood depths range from one (1) to three (3) feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow.

For both AO and AH zones, adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.

1. Standards for AH Zones. Development within AH Zones must comply with the standards in EC 9.6707(1), 9.6707(2) and 9.6707(2)(e).

2. Standards for AO Zones. In AO zones, the following provisions apply in addition to the standards in sections EC 9.6707(1) and 9.6707(2)(e).

    a. New construction, conversion to, and substantial improvement of residential structures and manufactured dwellings within AO zones shall have the lowest floor, including basement, elevated above the highest grade adjacent to the building, to or above the depth number specified on the Flood Insurance Rate Maps (FIRM) (at least two (2) feet if no depth number is specified). For manufactured dwellings the lowest floor is considered to be the bottom of the longitudinal chassis frame beam;

    b. New construction, conversion to, and substantial improvements of non-residential structures within AO zones shall either:

        i. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the Flood Insurance Rate Maps (FIRMS) (at least two (2) feet if no depth number is specified); or

        ii. Together with attendant utility and sanitary facilities, be completely floodproofed to or above the depth number specified on the FIRM or a minimum of two (2) feet above the highest adjacent grade if no depth number is specified, so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as stated in EC 9.6707(2)(c)3.a.

    c. Recreational vehicles placed on sites within AO Zones on the community's Flood Insurance Rate Maps (FIRM) shall either:

        i. Be on the site for fewer than 180 consecutive days, and

        ii. Be either:

            - Fully licensed and ready for highway use, 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

- Meet the elevation requirements of EC 9.6707(2)(e)2.a, and the anchoring and other requirements for manufactured dwellings of EC 9.6707(2)(c)4.

d. In AO zones, new and substantially improved appurtenant structures must comply with the standards in EC 9.6707(2)(c)6.

e. In AO zones, enclosed areas beneath elevated structures shall comply with the requirements in EC 9.6707(2)(a).

Section 11. Sections 9.6708 of the Eugene Code, 1971, is deleted in its entirety and is replaced with the following:

9.6708 Development in Floodplains – Miscellaneous

(1) Substantial Improvement Assessments and Determinations. The City Manager or their designee shall conduct Substantial Improvement (SI) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files.

(2) Substantial Damage Assessments and Determinations. The City Manager or their designee shall:

(a) Conduct Substantial Damage (SD) assessments when structures are damaged due to a natural hazard event or other causes;

(b) Make SD determinations whenever a structure within the special flood hazard area is damaged to the extent that 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.

(3) The applicant shall be responsible for preparing all technical data to support CLOMR/LOMR applications and paying any processing or application fees associated with the CLOMR/LOMR. The City is under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR application, until the applicant demonstrates that the project will meet, or has met, the requirements of this code and all applicable state and federal permits.

(4) Notice of Completion for CLOMR. An applicant shall notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

(5) Penalties for Noncompliance. No structure or land shall be constructed, located, extended, converted, or altered without full compliance with the terms of EC 9.6705-9.6709 and other applicable regulations. Violations of EC 9.6705-9.6709 by failure to comply with any of its

requirements (including violations of conditions and safeguards established in connection with conditions) are subject to the code enforcement provisions at EC 9.020-9.0280.

Section 12. Sections 9.6709 of the Eugene Code, 1971, is deleted in its entirety and is replaced with the following:

9.6709 Development in Floodplains – Variance Procedure.

(1) Generally, variances may be issued for new construction and substantial improvements that are 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, in conformance with the provisions of EC 9.6709(3), (5) and (6). As the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases.

(2) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(3) Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.

(4) Variances shall only be issued upon:

(a) A showing of good and sufficient cause;

(b) A determination that failure to grant the variance would result in exceptional hardship to the applicant;

(c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.

(5) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of EC 9.6709(2)-(4) are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

(6) Variance Notification. Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance and that such construction below the base flood elevation increases risks to life and property.

Section 13. The findings set forth in Exhibit A attached to this Ordinance are adopted as findings in support of this Ordinance.

Section 14. The City Recorder, at the request of, or with the concurrence of the City Attorney, is authorized to administratively correct any reference errors contained herein or in other provisions of the Eugene Code, 1971, to the provisions added, amended or repealed herein.

Section 15. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions hereof.

Section 16. In the interpretation and application of the code provisions added or amended by this ordinance, all provisions shall be:

(a) Considered as minimum requirements;

(b) Liberally construed in favor of the governing body; and

(c) Deemed neither to limit nor repeal any other powers granted under state statutes.

Section 17. 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 person-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.

Section 18. This ordinance shall not create liability on the part of the City of Eugene, any officer or employee thereof, or the Federal Insurance Administrator for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

Section 19. 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.

Section 20. This Ordinance shall take effect pursuant to Section 32 of the Eugene Charter 2002, or on the date of its acknowledgement as provided in ORS 197.625, whichever is later.

Passed by the City Council this

___ day of _____, 2022

_____
City Recorder

Approved by the Mayor this

____ day of _____, 2022

_____
Mayor