CITY OF ENGLEWOOD

ORDINANCE 19-06

AN ORDINANCE AMENDING CHAPTER 222 OF THE CITY CODE OF THE CITY OF ENGLEWOOD ENTITLED: "FLOOD DAMAGE PREVENTION"

Chapter 222 Flood Damage Prevention

§ 222-1 Statutory authorization.

The Legislature of the State of New Jersey has in N.J.S.A. 40:48-1 et seq. and N.J.S.A. 40:55D-1 et seq. delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

§ 222-2 Findings of fact.

- A. The flood hazard areas of the City of Englewood 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.
- B. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

§ 222-3 Statement of purpose.

It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. 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 flood blight areas;

- G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

§ 222-4 Methods of reducing flood losses.

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

- A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
- D. Controlling filling, grading, dredging, and other development which may increase flood damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

§ 222-5 Definitions.

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

AH ZONE

Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between one and three feet. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown in this zone

AO ZONE

Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet.

APPEAL

A request for a review of the local administrator's interpretation of any provision of this chapter or a request for a variance.

AREA OF SHALLOW FLOODING

A designated AO, AH, or VO Zone 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 flood is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD

The land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year. It is shown on the FIRM as Zone V, VE, V1-30, A, AO, A1-A30, AE, A99, or AH.

BASE FLOOD

The flood having a one-percent chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION (BFE)

The flood elevation shown on a published Flood Insurance Study (FIS) including the Flood Insurance Rate Map (FIRM). For zones AE, AH, AO, and A1-30 the elevation represents the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

BASEMENT

Any area of the building having its floor subgrade (below ground level) on all sides.

BEST AVAILABLE FLOOD HAZARD DATA

The most recent available flood risk guidance FEMA has provided. The Best Available Flood Hazard Data may be depicted on but not limited to Advisory Flood Hazard Area Maps, Work Maps or Preliminary FIS and FIRM.

BEST AVAILABLE FLOOD HAZARD DATA ELEVATION

The most recent available flood elevation FEMA has provided. The Best Available Flood Hazard Data Elevation may be depicted on an Advisory Flood Hazard Area Map, Work Map or Preliminary FIS and FIRM.

BREAKAWAY WALL

A wall that is part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or supporting foundation system.

DEVELOPMENT

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 of materials located within the area of special flood hazard.

ELEVATED BUILDING

A non-basement building (i) built, in the case of a building in an Area of Special Flood Hazard, to have the top of the elevated floor, elevated above the base flood elevation plus freeboard by means of piling, columns (posts and piers), or shear walls parallel to the flow of the water, and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood up to the magnitude of the base flood. In an Area of Special Flood Hazard "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters.

EROSION

The process of gradual wearing away of land masses.

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) is completed before the effective date of the floodplain management regulations adopted by a community.

FLOOD or FLOODING

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

- A. The overflow of inland or tidal waters; and/or
- B. The unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD INSURANCE RATE MAP (FIRM)

The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY (FIS)

The official report provided in which the Federal Insurance Administration has provided flood profiles, as well as the Flood Boundary - Floodway Map and the water surface elevation of the base flood.

FLOODPLAIN MANAGEMENT REGULATIONS

Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOODPROOFING

Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than 0.2 foot.

FREEBOARD

A factor of safety usually expressed in feet above a flood level for purposes of flood plain management. "Freeboard" tends to compensate for the many unknown 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.

HIGHEST ADJACENT GRADE

The highest natural elevation of the ground surface prior to construction next to the proposed or existing walls of a structure.

HISTORICAL STRUCTURE

Any structure that is:

- A. 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;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D. Individually listed on a local inventory of historic places in communications with historic preservation programs that have been certified either:
 - 1) By an approved state program as determined by the Secretary of the Interior; or
 - 2) Directly by the Secretary of the Interior in states without approved programs.

LOWEST FLOOR

The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for the parking of vehicles, building access or storage in an area other than a basement is not considered a building's lowest floor,

provided that such enclosure is not built so to render the structure in violation of other applicable nonelevation design requirements of 44 CFR Section 60.3.

MANUFACTURED HOME

A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a recreational vehicle.

MANUFACTURED HOME PARK or MANUFACTURED HOME SUBDIVISION

A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

NEW CONSTRUCTION

Structures for which the start of construction commenced on or after the effective date of a floodplain regulation adopted by a community and includes any subsequent improvements to such structures.

NEW 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) is completed on or after the effective date of the floodplain management regulations adopted by the municipality.

PRELIMINARY FLOOD INSURANCE RATE MAP (pre FIRM)

The draft version of the FIRM released for public comment before finalization and adoption.

RECREATIONAL VEHICLE

A vehicle which is built on a single chassis; 400 square feet or less when measured at the longest horizontal projections; designed to be self-propelled or permanently towable by a light-duty truck; and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

START OF CONSTRUCTION

For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. No. 97-348), includes substantial improvements and means the date the building permit was issued, provided that the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings or piers, or foundations or the erection of temporary forms, nor does it include

the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration effects the external dimension of the building.

STRUCTURE

A walled and roofed building, a manufactured home, or a gas or liquid storage tank, that is principally above ground.

SUBSTANTIAL DAMAGE

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% of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT

Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which exceeds 50% of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

- A. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement officer and which are the minimum necessary to assure safe living conditions; or
- B. Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.

VARIANCE

A grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

VIOLATION

The failure of a structure or other development to be fully compliant with this ordinance. A new or substantially improved structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR $\S60.3(b)(5)$, (c)(4), (c)(10), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

§ 222-6 Lands to which this chapter applies.

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

§ 222-7 Basis for establishing areas of special flood hazard.

The areas of special flood hazard for the city of Englewood, Community No. 340031, identified and defined on the following documents prepared by the Federal Emergency Management Agency:

- a) A scientific and engineering report entitled "The Flood Insurance Study of Bergen County, New Jersey, (All jurisdictions)" dated August 28, 2019.
- b) Flood Insurance Rate Map for Bergen County, New Jersey (All Jurisdiction) as shown on Index and panels 34003C0211H, 34003C0212H, 34003C0213H, 34003C0214H, 34003C0276H, 34003C0277H, whose effective date is August 28, 2019.
- c) Best Available Flood Hazard Data. These documents shall take precedence over effective panels and FIS in construction and development regulations only. Where the effective mapping or Base Flood Elevation conflict or overlap with the Best Available Flood Hazard Data, whichever imposes the more stringent requirement shall prevail.

Any revisions thereto, is hereby adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file in the office of the City Clerk, City Hall, 2-10 North Van Brunt Street, Englewood, New Jersey and is available for public inspection during regular office hours.

§ 222-8 Violations and penalties.

No structure or land shall hereafter be constructed, <u>re</u>located <u>to</u>, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. The failure to comply with any of the provisions of this chapter (including the failure to comply with any conditions and safeguards established in connection with conditions) shall constitute a violation. Any person who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$1,000 or imprisoned for not more than 90 days, or both, for each violation. Nothing herein contained shall prevent the City of Englewood from taking such other lawful action as is necessary to prevent or remedy any violation, including injunctive relief.

§ 222-9 Abrogation and greater restrictions.

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

§ 222-10 Interpretation.

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

A. Considered as minimum requirements;

- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

§ 222-11 Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the City of Englewood, any officer or employee thereof or the Federal Insurance Administration for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

§ 222-12 Compliance with other laws.

Nothing contained herein shall be construed so as to relieve nor shall any approvals granted hereunder have the effect of relieving an applicant for development from obtaining any and all New Jersey Department of Environmental Protection permits or approvals otherwise required by law.

§ 222-13 Establishment of development permit.

- A. A development permit shall be obtained before construction or development begins, including placement of manufactured homes, within any area of special flood hazard established in § 222-7. Application for a development permit shall be made on forms furnished by the local administrator 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.
- B. Specifically, the following information is required:
 - 1) Elevation in relation to mean sea level of the lowest floor (including basement) of all structures;
 - 2) Elevation in relation to mean sea level to which any structure has been floodproofed;
 - Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in § <u>222-</u> <u>17B(2)</u>; and
 - 4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

§ 222-14 Designation of local administrator.

The Construction Code Official is hereby designated as the local administrator to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

§ 222-15 Duties and responsibilities of local administrator.

Duties of the local administrator shall include, but not be limited to:

A. Permit review.

- 1) Review all development permits to determine that the permit requirements of this chapter have been satisfied.
- 2) Review all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
- 3) Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of § 222-17C(1) are met.
- B. Use of other base flood and floodway data. When base flood elevation and floodway data has not been provided in accordance with § 222-7, Basis for establishing areas of special flood hazard, the City Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer § 222-17B(1), Residential construction, and B(2), Nonresidential construction.
- C. Information to be obtained and maintained. The local administrator shall:
 - 1) Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
 - 2) For all new substantially improved floodproofed structures:
 - a) Verify and record the actual elevation (in relation to mean sea level); and
 - b) Maintain the floodproofing certifications required in § <u>222-13B(3)</u>.
 - 3) Maintain for public inspection all records pertaining to the provisions of this chapter.
- D. Alteration of watercourses. The local administrator shall:

- 1) Notify adjacent communities and the New Jersey Department of Environmental Protection, Bureau of Flood Control prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
- 2) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

E. Substantial Damage Review

After an event resulting in building damages, assess the damage to structures due to flood and non-flood causes.

- a) Record and maintain the flood and non-flood damage of substantial damage structures and provide a letter of Substantial Damage Determination to the owner and the New Jersey Department of Environmental Protection, Bureau of Flood Control.
- b) Ensure substantial improvements meet the requirements of sections 222-17B(1), Specific Standards, Residential Construction, 222-17B(2), Specific Standards, Nonresidential Construction and 222-17B(3), Specific Standards, Manufactured Homes.
- F. Interpretation of FIRM boundaries. The local administrator shall make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in § 222-16.

§ 222-16 Variance and appeal procedures.

A. Appeal procedure.

- 1) The Planning Board of the City of Englewood shall be designated as the appeal board to hear and decide appeals and requests for variances from the requirements of this chapter; provided, however, that with respect to an appeal or a request for a variance concerning any application for development which would otherwise require the approval of the Zoning Board of Adjustment, the Zoning Board of Adjustment shall act as the appeal board.
- 2) The Planning Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Construction Code Official in the enforcement or administration of this chapter, and requests for variances from the requirements of this chapter.

- 3) Hearings respecting such appeals or requests for variances shall be conducted, and notice thereof provided, in accordance with the provisions of N.J.S.A. 40:55D-10 and 40:55D-12.
- 4) Decision rendered by the Planning Board shall be final, and any further appeal therefrom shall be taken to the courts in accordance with the applicable Rules of Court.
- 5) In passing upon such applications, the appeal board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:
 - a) The danger that materials may be swept onto other lands to the injury of others;
 - b) The danger to life and property due to flooding or erosion damage;
 - c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d) The importance of the services provided by the proposed facility to the community;
 - e) The necessity to the facility of a waterfront location, where applicable;
 - f) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - g) The compatibility of the proposed use with existing and anticipated development;
 - h) The relationship of the proposed use to the Comprehensive Plan and floodplain management program of that area;
 - i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - k) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- 6) Upon consideration of the factors of § 222-16A(5) and the purposes of this chapter, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

7) The Construction Code Official shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Insurance Administration upon request.

B. Conditions for variances.

- 1) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, provided that items in Subsection A(5)(a) through (k) in this § 222-16 have been fully considered. As the lot size increases beyond the 1/2 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 a 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 designated floodway if any increase in flood levels during the base flood discharge would result.
- 4) Variances shall only by issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 5) 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; and
 - 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 as identified in § 222-16A(5), or conflict with existing local laws or ordinances.
- 6) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

§ 222-17 Provisions for flood hazard reduction.

A. General standards. In all areas of special flood hazards, compliance with the applicable requirements of the Uniform Construction Code (N.J.A.C. 5:23) and the following standards, whichever is more restrictive, is required

1) Anchoring.

- a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- b) All manufactured homes shall be anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

2) Construction materials and methods.

- a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

3) Utilities.

- a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system; and
- b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and
- c) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- d) For all new construction and substantial improvements, Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

4) Subdivision or development proposals.

- a) All subdivision and other new development proposals shall be consistent with the need to minimize flood damage;
- b) All subdivision and other new development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

- c) All subdivision and other new development proposals shall have adequate drainage provided to reduce exposure to flood damage; and
- d) Base flood elevation data shall be provided for all subdivision and other new development proposals.
- 5) Enclosure openings. For all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: A minimum of two openings in at least two (2) exterior walls of each enclosed area having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other covering or devices, provided that they permit the automatic entry and exit of floodwaters.
- B. Specific standards. In all areas of special flood hazards where base flood elevation data have been provided as set forth in § 222-7, Basis for establishing areas of special flood hazard, or in § 222-15B, Use of other base flood and floodway data, the following standards are required:
 - 1) Residential construction. New construction and substantial improvement of any residential structure located in an A or AE zone shall have the lowest floor, including basement together with the attendant utilities (including all electrical, heating, ventilating, air- conditioning and other service equipment) and sanitary facilities, elevated at or above the more restrictive, base flood elevation (published FIS/FIRM) plus one (1) foot, the best available flood hazard data elevation plus one (1) foot, or as required by ASCE/SEI 24-14, Table 2-1.
 - 2) Nonresidential construction.

In an Area of Special Flood Hazard, all new construction and substantial improvement of any commercial, industrial or other nonresidential structure located in an A or AE zone shall have the lowest floor, including basement together with the attendant utilities and sanitary facilities as well as all electrical, heating, ventilating, air-conditioning and other service equipment:

Either

a) Elevated at or above the more restrictive, base flood elevation (published FIS/FIRM) plus one (1) foot, the best available flood hazard data elevation plus one (1) foot, or as required by ASCE/SEI 24-14, Table 2-1;

Or

- b) Be floodproofed so that below the more restrictive, base flood elevation (published FIS/FIRM) plus one (1) foot, the best available flood hazard data elevation plus one (1) foot, or as required by ASCE/SEI 24-14, Table 6-1,
- c) The structure is watertight with walls substantially impermeable to the passage of water:
- d) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,
- e) 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 the applicable provisions of this subsection. Such certification shall be provided to the official as set forth in section 222-15C(2).
- 3) Manufactured homes.
 - a) Manufactured homes shall be anchored in accordance with § 222-17A(1)(b).
 - b) All manufactured homes to be placed or substantially improved within an area of special flood hazard shall:
 - i. Be consistent with the need to minimize flood damage,
 - ii. Be constructed to minimize flood damage,
 - iii. Have adequate drainage provided to reduce exposure to flood damage,
 - iv. Be elevated on a permanent foundation such that the top of the lowest floor is at or above the more restrictive, base flood elevation (published FIS/FIRM) plus one (1) foot, the best available flood hazard data elevation plus one (1) foot, or as required by ASCE/SEI 24-14, Table 2-1,
 - v. The 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 and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement.
- C. Floodways. Located within areas of special flood hazard established in § 222-7 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
 - 1) Encroachments, including fill, new construction, substantial improvements, and other development, are prohibited unless a technical evaluation demonstrates that

encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. All encroachments require permits and/or waivers from the New Jersey Department of Environmental Protection. If this Subsection $\underline{C(1)}$ is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of § 222-17, Provisions for flood hazard reduction.

- 2) The placement of any manufactured homes, except in an existing manufactured home park or existing manufactured home subdivision, is prohibited.
- 3) In all areas of special flood hazard in which base flood elevation data has been provided and no floodway has been designated, the cumulative effect of any proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than 0.2 foot at any point.

§ 222-18 Effective date; filing of copies.

- A. This chapter shall take effect on August 28, 2019, and upon passage and publication as required by law.
- B. Copies of this chapter shall be on file in the office of the City Clerk, the New Jersey Department of Environmental Protection and the Federal Emergency Management Agency.

ORDINANCE #19-06

AN ORDINANCE AMENDING CHAPTER 222 OF THE CITY CODE OF THE CITY OF ENGLEWOOD ENTITLED: "FLOOD DAMAGE PREVENTION"

RECORD OF VOTE

FIRST READING DATE: June 27, 2019

COUNCIL	MOTION	VOTE
Cobb		Y
Cohen		Y
Glynn		Y
Hamer	X	Y
Rosenberg		Y

DATE PUBLISHED IN THE RECORD: July 13, 2019

DATES PUBLIC HEARINGS HELD: July 23, 2019

DATE SECOND READING HELD: July 23, 2019

N=OPPOSED

Y=YES

COUNCIL	MOTION	OPEN	MOTION	CLOSE	MOTION	ADOPT
Cobb		Y		Y		Y
Cohen		Y		Y		Y
Glynn		Y		Y		Y
Hamer		Y		Y		Y
Rosenberg	X	Y	X	Y	X	Y

A=ABSTAINED

AB=ABSENT

City Clerk

PRESENTED TO MAYOR: July 26,	2019
APPROVED	
REJECTED(VETO) DATE:	MAYOR MICHAEL WILDES
	I do hereby certify that the foregoing is a true and exact copy of an Ordinance adopted and approved by the Mayor and Council of the City of Englewood.
	Yancy Wazirmas RMC