

Ordinance No. 2026-01

AN ORDINANCE ADOPTING TITLE 41 - FLOOD DAMAGE PREVENTION

WHEREAS, The Legislature of the State of Utah, in Utah Code. Ann. § 10-3-701, has delegated the responsibility to adopt regulations designed to minimize flood losses to local government;

WHEREAS, The Town of Genola desires to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended), a voluntary program administered by the Federal Emergency Management Agency (FEMA), a component of the U.S. Department of Homeland Security;

WHEREAS, The flood hazard areas of the Town of Genola are subject to periodic inundation by flood waters, which results in potential loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief; all of which adversely affect the public health, safety and general welfare;

NOW THEREFORE, be it ordained by the governing body of the Town of Genola:

1. Adoption of Title 41 - Flood Damage Prevention. The Genola Town Council adopts the attachment affixed to this ordinance as Title 41 - Flood Damage Prevention, of the Genola Municipal Code.
2. Effective Date. This ordinance shall become effective immediately after publication or posting as required by Utah Code.
3. Captions: Captions herein are for convenience only, and neither limit nor amplify the provisions of this Ordinance.
4. Repeal of Conflicting Ordinances. To the extent that any ordinances, resolutions or policies of the Town of Genola conflict with the provisions of this ordinance, they are hereby amended to be in accordance with the provisions hereof.

ATTACHMENT

TITLE 41 - FLOOD DAMAGE PREVENTION

TITLE 41 – FLOOD DAMAGE PREVENTION

CHAPTER 1 - PURPOSE AND METHODS

Sections:¹

41.01.01 PURPOSE
41.01.02 METHODS OF REDUCING FLOOD LOSSES

41.01.01 PURPOSE

It is the purpose of this ordinance to promote the public health, safety and general welfare of the community 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 damage to public infrastructure, including but not limited to utilities, streets, and bridges that are susceptible to flooding;
- C. Minimize prolonged business interruptions caused by flooding;
- D. Minimize public expenditures on flood control projects;
- E. Minimize the need for rescue and relief efforts associated with flooding and are generally undertaken at the expense of the public;
- F. Protect and safeguard the welfare and safety of first responders should an emergency response be needed;
- G. Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize future flood blight areas; and
- H. Promote that potential buyers are notified if properties are in a flood area.

41.01.02 METHODS OF REDUCING FLOOD LOSSES

To accomplish the purposes outlined above, this ordinance applies the following methods:

- A. Restrict or prohibit land uses that are dangerous to health, safety, or property in times of flooding, or cause excessive increases in flood heights or velocities;
- B. Require that land uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;

¹ Previous Versions and Ordinances

rear of a structure; vertical additions added on top of a structure; and enclosures added underneath a structure.

Alluvial Fan Flooding means flooding occurring on the surface of an alluvial fan or similar landform that originates at the apex. It is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

Area of Future-Conditions Flood Hazard means the land area that would be inundated by the 1-percent-annual-chance (100-year) flood, based on future-conditions hydrology.

Area of Shallow Flooding means a designated AO, AH, AR/AO, or AR/AH zone on a community's Flood Insurance Rate Map (FIRM) with a 1 percent or greater annual chance of flooding to an average depth of 1 to 3 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-Related Erosion Hazard is the land within a community that is most likely to be subject to severe flood-related erosion losses. The area may be designated as Zone E on the Flood Hazard Boundary Map (FHBM). After the detailed evaluation of the special flood-related erosion hazard area, in preparation for publication of the FIRM, Zone E may be further refined.

Area of Special Flood Hazard (SFHA) is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

Base Flood means the flood having a 1-percent chance of being equaled or exceeded in any given year.

Base Flood Elevation (BFE) is the water surface elevation of the 1-percent-annual-chance flood event. It is the height in relation to mean water level expected to be reached by the waters of the base flood at pertinent points in the floodplains of riverine areas. It is also the elevation shown on the FIRM and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1-A30, AR, V1-V30, or VE that indicates the water surface elevation resulting from the flood that has a 1-percent chance of equaling or exceeding that level in any given year.

Basement means any area of the building having its floor subgrade (below ground level) on all sides. A walkout basement that does not require a step up to grade is not considered a basement.

Best Available Data is existing flood hazard information adopted by a community and reflected on an effective FIRM, FBFM, and/or within an FIS report; or draft or

Conditional Letter of Map Revision Based on Fill (CLOMR-F) is FEMA's comment on a proposed structure or property. The letter does not revise an effective map; it indicates whether the project, if built as proposed, would be removed from the floodplain.

Crawlspace means an under-floor space that has its interior floor area (finished or not) no more than 4 feet from the bottom floor joist the next higher floor elevation, designed with proper openings that equalize hydrostatic pressures of flood water, and is not used for habitation.

Critical Facility means a facility or building where even a slight chance of flooding is too great a threat. Typical critical facilities include hospitals, fire stations, police stations, schools, storage of critical records, assisted living and similar facilities.

Deed Restriction refers to a clause in a deed that limits the future use of the property in some respect. Deed restrictions may impose a vast variety of limitations and conditions. For example, they may limit the density of buildings, dictate the types of structures that can be erected, or prevent buildings from being used for specific purposes or from being used at all.

Detached Garage is a building that is used solely for storage of materials or vehicle parking for up to four housing occupants. If a detached garage is designed or used for habitation or conducting business, or has multiple stories, then the building is not considered a detached garage under the NFIP.

Development means any human-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, demolition, excavation or drilling operations, or storage either temporary or permanent of equipment or materials.

Elevated Building is a non-basement building built, in the case of a building in Zone A1-30, AE, A, A99, AR, AO, AH, B, C, X and D, to have the top of the elevated floor above the ground level by means of pilings, columns (post and piers), or shear walls parallel to the flow of the water and adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of a building in Zone A1-30, AE, A, A99, AR, AO, AH, B, C, X and D, an "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.

Enclosure refers to an enclosed walled-in area below the lowest floor of an elevated building. Enclosures below the BFE may only be used for building access, vehicle parking, and storage.

Erosion means the process of the gradual wearing away of land masses by wind, water, or other natural agents.

Existing Construction refers to structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. It may also be referred to as **Existing Structures**.

Flood Insurance Rate Map (FIRM) means an official map of a community, on which the Administrator has delineated both the SFHAs and the risk premium zones applicable to the community.

Flood Insurance Study (FIS) or Flood elevation study means an examination, evaluation, and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

Floodplain Development Permit is a community issued permit or document that is used for any development that occurs within an SFHA identified by FEMA or the community. It is used to address the proposed development to ensure compliance with the community's ordinance.

Floodplain or Flood-Prone Area means any land area susceptible to being inundated by water from any source whether or not identified by FEMA (see definition of ***Flooding***).

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

Floodplain Management Regulations means 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 flood damage prevention and reduction.

Flood Opening refers to an opening in the wall of an enclosed structure that allows floodwaters to automatically enter and exit the enclosure. Refer to FEMA Technical Bulletin 1.

Flood Protection System means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to an SFHA and to reduce the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized, flood modifying works are those constructed in conformance with sound engineering standards. FEMA only accredits levees, both private and public, that have been certified by a professional engineer or firm in which the certification shows that the levee have met and continue to meet the minimum regulatory standards cited in Title 44, Chapter 1, Section 65.10 of the Code of Federal Regulations (44 CFR 65.10).

Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents. Floodproofing can either be accomplished in the form of dry floodproofing in which the structure is watertight below the levels that need flood protection, or wet floodproofing in

Letter of Map Amendment (LOMA) means an official amendment, by letter, to an effective FIRM. A LOMA establishes a property's location in relation to the SFHA. It is usually issued because a property or structure has been inadvertently mapped as being in the floodplain, when the property or structure is actually on natural high ground above the BFE.

Letter of Map Revision (LOMR) means FEMA's modification or revision to an entire or portion of the effective FIRM, or Flood Boundary and Floodway Map, 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 BFEs, or the SFHA.

Letter of Map Revision Based on Fill (LOMR-F) means FEMA's amendment, by letter, to an effective FIRM where fill was brought in or used to elevate a property, portion of property or structure above the BFE.

Levee means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee System means a flood protection system that consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Limit of Moderate Wave Action (LiMWA) means the boundary line given by FEMA on coastal map studies marking the extents of Coastal A Zones (CAZ).

Lowest Adjacent Grade (LAG) means the lowest natural elevation of the ground surface prior to construction next to the proposed walls of a structure. For an existing structure, it means the lowest point where the structure and ground touch, including but not limited to attached garages, decks, stairs, and basement windows.

Lowest Floor means 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 Section 60.3.

Manufactured Home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle"; however, a manufactured home may be used for both residential and non-residential use.

Manufactured Home Park or Subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Map means the FHBM or the FIRM for a community issued by FEMA.

- C. Designed to be self-propelled or permanently towable by a light duty truck; and
- D. Designed primarily, not for use as a permanent dwelling but, as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, brook, creek, etcetera, which can be intermittent or perennial.

Section 1316 refers to the section of the National Flood Insurance Act of 1968, as amended, which provides for the denial of flood insurance coverage for any property that the Administrator finds has been declared by a duly constituted State or local authority to be in violation of State or local floodplain management regulations. Section 1316 is issued for a property, not a property owner, and remains with the property even after a change of ownership.

Special Flood Hazard Area (SFHA) —see *Area of Special Flood Hazard*.

Start of Construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)) includes substantial improvement, and means the date the building permit was issued, provided 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 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. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means, for floodplain management purposes, a walled and roofed building, culvert, bridge, dam, or a gas or liquid storage tank that is principally above ground, as well as a manufactured home. **Structure**, for insurance purposes, means:

- A. A building with two or more outside rigid walls and a fully secured roof, which is affixed to a permanent site;

CHAPTER 3 GENERAL PROVISIONS

Sections:³

41.03.01	LANDS TO WHICH THIS ORDINANCE APPLIES
41.03.02	BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD
41.03.03	ESTABLISHMENT OF DEVELOPMENT PERMIT
41.03.04	ABROGATION AND GREATER RESTRICTIONS
41.03.05	INTERPRETATION
41.03.06	WARNING AND DISCLAIMER OR LIABILITY
41.03.07	SEVERABILITY
41.03.08	COMPLIANCE
41.03.09	STOP WORK ORDER

41.03.01 LANDS TO WHICH THIS ORDINANCE APPLIES

The ordinance shall apply to all areas of special flood hazard identified by FEMA.

41.03.02 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency effective June 23, 2026, Flood Insurance Rate Maps and Flood Boundary-Floodway Maps (FIRM and FBFM) or Digital Flood Insurance Rate Maps (DFIRM), and other supporting data, are adopted by reference and declared a part of this ordinance, and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance.

41.03.03 ESTABLISHMENT OF DEVELOPMENT PERMIT

A Floodplain Development Permit shall be required for all development to which this ordinance applies to ensure conformance with the provisions of this ordinance.

41.03.04 ABROGATION AND GREATER RESTRICTIONS

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

41.03.05 INTERPRETATION

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

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and

³ Previous Versions and Ordinances

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violation of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a Class C misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than \$750 for each violation, assessed daily, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the Town of Genola from taking such other lawful action as is necessary to prevent or remedy any violation.

CHAPTER 4 ADMINISTRATION

Sections:⁴

41.04.01	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR
41.04.02	DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR
41.04.03	REQUIREMENT TO SUBMIT NEW TECHNICAL DATA
41.04.04	PERMIT PROCEDURES
41.04.05	VARIANCE PROCEDURES

41.04.01 DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Genola Town Mayor, or designee, is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of the NFIP Regulations and 44 CFR pertaining to floodplain management.

41.04.02 DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

- A. Uphold the goals of the community and the NFIP to reduce risk when possible and increase the community's resistance to future disasters.
- B. Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance, including the actual elevation of the lowest floor (including basement or crawlspace) of all new or substantially improved structures and any floodproofing certificates, including the data supporting such certificates.
- C. Maintain and hold open for public inspection maps that identify and locate the boundaries of the SFHAs to which this ordinance applies, including, but not limited to, the FIRM.

⁴ Previous Versions and Ordinances

when development altered a watercourse, modified floodplain boundaries, or modified BFE.

2. The property owner or developer shall be responsible for preparing technical data to support the CLOMR or LOMR application and paying any processing or application fees to FEMA. The property owner or developer is responsible for submitting the CLOMR and LOMR to FEMA and shall provide all necessary data to FEMA if requested during the review process to ensure the CLOMR or LOMR is issued.
3. The Floodplain Administrator shall be 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 or has met the requirements of this ordinance and all applicable state, federal, and local laws.

41.04.04 PERMIT PROCEDURES

Application for a Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to:

- A. Duplicated plans drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations.
- B. Duplicated plans drawn to scale showing the location, dimensions, and elevation of existing and proposed structures, including the placement of manufactured homes.
- C. Location of the foregoing in relation to SFHAs.
- D. Elevation (in relation to mean sea level), of the lowest floor (including basement and crawlspace) of all new and substantially improved structures, if applicable;
- E. Elevation (in relation to mean sea level), to which any nonresidential structure (if applicable) shall be floodproofed.
- F. A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure (if applicable) shall meet the floodproofing criteria of this ordinance and the NFIP Regulations.
- G. Description of the extent to which any watercourse or natural drainage will be altered or relocated because of proposed development, if applicable.
- H. At the community's discretion, the community may charge a fee for issuance of floodplain development permits.
- I. Copies of all floodplain development permits and the associated documents shall become property of the community and a permanent record.

Approval or denial of a Development Permit by the Floodplain Administrator shall be based on all of the provisions of this ordinance and the following relevant factors:

increases beyond the one-half acre, the technical justification required for issuing the variance increases.

- E. Upon consideration of the factors noted above and the intent of this ordinance, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this ordinance.
- F. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- G. 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. The term "substantial improvement" does not include any alteration of a structure or facility listed on the National Register of Historic Places or a State Inventory of Historic Places.

Prerequisites for granting variances:

- A. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief. Variances shall only be issued upon:
 - 1. Showing a good and sufficient cause.
 - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant.
 - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, conflict with existing local laws or ordinances, considers the need of ingress and egress during times of floods, and does not jeopardize first responders' health and welfare.
- B. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the BFE, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- C. Variances may be issued by the Town for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:
 - 1. The criteria outlined in Section 41.04.05 VARIANCE PROCEDURES are met; and
 - 2. The structure or other development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.

- F. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters.
- G. On-site waste disposal systems shall be designed or located to avoid impairment to them or contamination from them during flooding.

41.05.02 SUBSTANTIAL IMPROVEMENT

Any combination of repair, reconstruction, rehabilitation, addition, or improvement of a building or structure, if the cumulative cost of the entire project equals or exceeds 50 percent, of the market value of the structure only (not of the structure and land value combined) before the improvement or repair is started then the work shall be considered as substantial improvement. If the structure has sustained substantial damage, any repairs are considered substantial improvements regardless of the actual repair work performed. For Substantial Damage, refer to Section 41.05.03 SUBSTANTIAL DAMAGE. The term does not, however, include either:

- A. Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
- B. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

41.05.03 SUBSTANTIAL DAMAGE

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure only, before the damage occurred. This term also applies to structures which have incurred any damage that equals or exceeds 50 percent of the structure's market value regardless of the actual repair work performed. When a structure or building has been determined as substantially damaged, any work or repair on said structure or building will be considered as substantial improvement and will be required to meet the development requirements set forth within this ordinance for substantial improvement.

41.05.04 SUBSTANTIAL IMPROVEMENT AND SUBSTANTIAL DAMAGE DETERMINATION

For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the applicable community officials and staff, shall:

- A. Estimate the market value or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure only, not of land and building, before the start of construction of the proposed work. In the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made.

shall be maintained by the Floodplain Administrator. If the use or occupancy of the building changes in the future to residential, then the dry floodproofing of the structure cannot be used when determining compliance of the structure to the residential construction of this ordinance, 41.05.06 RESIDENTIAL CONSTRUCTION FOR ZONES A1-30, A, AND AE. As such, the building will not be grandfathered into compliance and will be required to be brought into compliance with the residential construction requirements of this ordinance.

41.05.08 ENCLOSURES FOR ZONES A1-30, A, AND AE

New construction and substantial improvements, with fully enclosed areas below the lowest floor that are to be used solely for parking of vehicles, building access, or storage in an area other than a basement, and 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. A minimum of two openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.
- B. The bottom of all openings shall be no higher than 1 foot above grade.
- C. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- D. The development and construction of the structure must conform with the provision in FEMA/Federal Insurance Administration (FIA)-Technical Bulletins 1 and 2. Certification and documentation from a professional, licensed engineer or architect is required if the structure's lowest floor is built below the BFE.

41.05.09 CRAWLSPACE FOR ZONES A1-30, A, AND AE

New construction and substantial improvements built on a crawlspace or sub-grade (below grade) crawlspace may be permitted if the development is designed and meets or exceeds the standards found in FEMA's Technical Bulletins 1, 2, and 11, which include but are not limited to the following:

- A. The structure must be affixed to a permanent foundation, designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than 5 feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer.

- a. outside of a manufactured home park or subdivision;
- b. in a new manufactured home park or subdivision;
- c. in an expansion to an existing manufactured home park or subdivision; or
- d. in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood,

shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to one foot above the BFE, unless a higher standard option was selected, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

In A-1-30, AH, AO, AE, V and VE Zones, manufactured homes to be placed or substantially improved in an existing manufactured home park shall be elevated so that:

- a. the lowest floor at one foot above the BFE; or
- b. the chassis is supported by reinforced piers no less than 36 inches in height above grade and securely anchored.

41.05.11 RECREATIONAL VEHICLES

In A-1-30, AH, AO, AE, V and VE Zones, Recreational Vehicles must be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached structures or addition.

41.05.12 STANDARDS FOR SUBDIVISION PROPOSALS

- A. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Development Permit requirements of this ordinance to minimize flood damage.
- B. All subdivision preliminary plats/development plans shall include the mapped flood hazard zones from the effective FIRM.
- C. BFE data shall be generated for subdivision proposals and other proposed development, including the placement of manufactured home parks and subdivisions, which is greater than 50 lots or 5 acres, or whichever is lesser.
- D. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

- A. Designate a regulatory floodway that will not increase the base flood elevation more than 1 foot.
- B. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway *unless* it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase greater than 0.00 feet, unless higher standard option selected, in flood levels within the community during the occurrence of the base flood discharge.
- C. All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article V in this ordinance.
- D. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the NFIP Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in BFEs, provided that the community first applies for a conditional FIRM and floodway revision through FEMA.

41.05.15 ELEVATED BUILDINGS

Enclosed areas of elevated buildings, of new construction and substantially improved structures, which is below the lowest floor or below the lowest horizontal structural member in V/VE zones shall meet all the following:

- 1. Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;
- 2. Shall be constructed entirely of flood resistant materials at least to the Regulatory Base Flood Elevation. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood opening as outlined above.