

CHAPTER 11: CONSTRUCTION SUBJECT TO GEOLOGIC, FLOOD, OR OTHER NATURAL HAZARDS

11.1. PURPOSE.

To protect the general public from geologic, flood, or other natural hazards that might be detrimental to the health, safety, and general welfare of the residents of the Town of Virgin. Any applicant whose application for a conditional use or building permit for any site which has potential soils, earthquake, flood or other discernible hazards may be required to provide a report addressing such hazards. The determination of whether such report shall be required shall be made by the Virgin Town Planning and Zoning Commission.

11.2. REQUIREMENTS.

11.2.1. The report shall be prepared at applicant's expense by a registered or licensed geologist, soils, engineer, or civil engineer and shall show the suitability of soils on the property to accommodate the proposed construction as well as any discernible flood or earthquake hazards.

11.2.2. Whenever a geologic and soils survey report indicates that a lot is subject to unusual potential or actual hazard, the applicant shall meet the special conditions required by the Virgin Town Planning and Zoning Commission or the Virgin Town Zoning Administrator, when authorized, to reduce or eliminate such hazards.

11.3. FLOOD DAMAGE PREVENTION.

11.3.1. STATUTORY AUTHORIZATION.

The Legislature of the State of Utah has delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Town Council of Virgin, Utah, does ordain as follows:

11.3.2. FINDINGS OF FACT.

11.3.2.A. Section 1

The flood hazard areas of Virgin, Utah are subject to periodic inundation which results in 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.

11.3.2.B. Section 2

These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood proofed or otherwise protected from flood damage.

11.3.2.C. Statement of Purpose.

It is the purpose of this ordinance 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:

11.3.2.C.i. Protect human life and health;

11.3.2.C.ii. Minimize expenditure of public money for costly flood control projects;

11.3.2.C.iii. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

11.3.2.C.iv. Minimize prolonged business interruptions;

11.3.2.C.v. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

11.3.2.C.vi. 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

11.3.2.C.vii. Insure that potential buyers are notified that property is in a flood area.

11.3.2.D. METHODS OF REDUCING FLOOD LOSSES.

11.3.2.D.i. In order to accomplish its purposes, this ordinance uses the following methods:

11.3.2.D.i.1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;

11.3.2.D.i.2. require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

11.3.2.D.i.3. control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;

11.3.2.D.i.4. Control filling, grading, dredging and other development which may increase flood damage; * Stripping natural vegetation.

11.3.2.D.i.5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

11.3.2.D.i.6. Build home at least one foot (1') above the one-hundred (100) year flood plain.

11.3.3. DEFINITIONS

Unless specifically defined in VULU Chapter 1.6., words or phrases used in this ordinance shall be interpreted to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

11.3.4. GENERAL PROVISIONS

11.3.4.A. Lands To Which This Ordinance Applies.

The ordinance shall apply to all areas of special flood hazard within the jurisdiction of Virgin, Utah.

11.3.4.B. Basis For Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled, "The flood Insurance Study for Virgin, Utah, with accompanying Virgin Town Flood Insurance Rate Maps and Flood Boundary- Floodway Maps

(FIRM and FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance. Until such time as flood maps become available, the property/land owner should be responsible for the flood map.

Flood Insurance Rate Maps and Flood Boundary-Floodway Maps (FIRM and FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance

11.3.4.C. Establishment Of Development Permit.

A development Permit shall be required to ensure conformance with the provisions of this ordinance.

11.3.4.D. Compliance.

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this ordinance and other applicable regulations.

11.3.5.E. 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.

11.3.4.F. Interpretation.

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

11.3.4.F.i. Considered as minimum requirements;

11.3.4.F.ii. liberally construed in favor of the governing body; and

11.3.4.F.iii. deemed neither to limit nor repeal any other powers granted under State statutes.

11.3.4.G. Warning and Disclaimer or Liability.

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

11.3.5. ADMINISTRATION.

11.3.5.A. Designation Of The Floodplain Administrator.

The Mayor or Engineer is hereby appointed the floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate Sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

11.3.5.B. Duties & Responsibilities of the Floodplain Administrator.

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

11.3.5.B.i. Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance.

11.3.5.B.ii. Review permit application to determine whether proposed building site, flooding.

11.3.5.B.iii. Review, approve or deny all applications for development permits required by adoption of this ordinance.

11.3.5.B.iv. Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.

11.3.5.B.v. Where interpretation is 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 floodplain Administrator shall make the necessary interpretation.

11.3.5.B.vi. Notify, in riverine situations, adjacent communities and the State Coordinating Agency which is Army Corp of Engineers & State Agency, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency management Agency.

11.3.5.B.vii. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

11.3.5.B.viii. When base flood elevation data has not been provided in accordance with section 11.3.5.b., the floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of VULU Chapter 11, Section 11.4.

11.3.5.C. 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, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

11.3.5.C.i. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures.

11.3.5.C.ii. Elevation in relation to mean sea level to which any nonresidential structure shall be flood proofed.

11.3.5.C.iii. A certificate from a registered professional engineer or architect that the nonresidential flood proofed structure shall meet the flood proofing criteria of VULU Chapter 11, Section 11.4.2.b.

11.3.5.C.iv. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

11.3.5.C.v. Maintain a record of all such information in accordance with VULU Section 11.4.1.b. 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:

11.3.5.C.v.1. The danger to life and property due to flooding or erosion damage;

11.3.5.C.v.2. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

11.3.5.C.v.3. The danger that materials may be swept onto other lands to the injury of others;

11.3.5.C.v.4. The compatibility of the proposed use with existing and anticipated development;

11.3.5.C.v.5. The safety of access to the property in times of flood for ordinary and emergency vehicles;

11.3.5.C.v.6. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as twelve (12) sewer, gas, electrical and water systems;

11.3.5.C.v.7. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;

11.3.5.C.v.8. The necessity to the facility of a waterfront location, where applicable;

11.3.5.C.v.9. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

11.3.5.C.v.10. The relationship of the proposed use to the comprehensive plan for that area.

11.3.5.D. Variance Procedures.

11.3.5.D.i. The appeal Board as established by the community shall hear and render judgment on requests for variances from the requirements of this ordinance.

11.3.5.D.ii. The Appeal Board shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the floodplain Administrator in the enforcement or administration of this ordinance.

11.3.5.D.iii. Any person or persons aggrieved by the decision of the Appeal Board may appeal such decision in the courts of competent jurisdiction.

11.3.5.D.iv. The floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.

11.3.5.D.v. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this ordinance.

11.3.5.D.vi. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C.2 of this Article have been fully considered. As the lot size increases beyond the one-half-acre, the technical justification required for the variance increases.

11.3.5.D.vii. 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 VULU Chapter 11, Section 11.3.2.c.

11.3.5.D.viii. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

11.3.5.d.ix. 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.

11.3.5.D. x. Prerequisites for granting variances:

11.3.5.D.x.1. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

11.3.5.D.x.2. Variances shall only be issued upon:

11.3.5.D.x.2.A. showing a good and sufficient cause;

11.3.5.D.x.2.B. a determination that failure to grant the variance would result in exceptional hardship to the applicant; and

11.3.5.D.x.2.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 local laws or ordinances.

11.3.5.D.x.2.D. Homes shall not be built in the one-hundred (100) -year flood plain without proper engineering.

11.3.5.D.x.2.E. Any application to which 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 base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

11.3.5.D.x.2.F. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:

11.3.5.D.x.2.G. the criteria outlined in VULU Chapter 11, Section 11.3.5.d. are met; and

11.3.5.J.x.2.H. 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.

11.4. PROVISIONS FOR FLOOD HAZARD REDUCTION.

11.4.1. General Standards.

In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:

11.4.1.A. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

11.4.1.B. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

11.4.1.C. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;

11.4.1.D. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

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

11.4.1.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; and,

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

11.4.2. Specific Standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) VULU Chapter 11, Section 11.3.5.B., (ii) VULU Chapter 11, Section 11.3.5.B., or (iii) VULU Chapter 11, Section 11.4.3.C., the following provisions are required:

11.4.2.A. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain Administrator that the standard of this subsection as proposed in VULU Chapter 11, 11.3.5.C.i., is satisfied.

11.4.2.B. Nonresidential Construction. New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure 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 effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are flood proofed shall be maintained by the floodplain Administrator.

11.4.2.C. Manufactured Homes. Require that all manufactured homes to be placed within zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist not 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.

11.4.3. Standards For Subdivision Proposals.

11.4.3.A. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with VULU Chapter 11, section 11.3.2.A., 11.3.2.B. and 11.3.2.C., of this ordinance.

11.4.3.B. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet development Permit requirements of VULU Chapter 11, Section 11.3.4.C.; Section 11.3.5.C.; and the provisions of Section 11.4. of this ordinance.

11.4.3.C. Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than fifty (50) lots or five (5) acres, whichever is lesser, if not otherwise provided pursuant to VULU Chapter 11, Section 11.3.4.B.; or Section 11.3.5., Section 11.3.5.B.viii. of this ordinance.

11.4.3.D. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

11.4.3.E. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.