

# City of Valdosta Land Development Regulations

## Chapter 320 Flood Damage Prevention

### Section 320-1 Statutory Authorization, Findings of Fact, Purpose and Objectives

- (A) Authorization. Article IX, Section II of the Constitution of the State of Georgia and Section 36-1-20(a) of the Official Code of Georgia Annotated (OCGA) have delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Valdosta, Georgia, does ordain as follows:
- (B) Findings of Fact.
- (1) The flood hazard areas of Valdosta, Georgia 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 relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
  - (2) These flood losses are caused by the occupancy in flood hazard areas of uses vulnerable to floods, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in flood plains causing increases in flood heights and velocities.
- (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:
- (1) Require that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction.
  - (2) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion.
  - (3) Control filling, grading, dredging and other development which may increase flood damage or erosion.
  - (4) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.
  - (5) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters.
- (D) Objectives. The objectives of this ordinance are:
- (1) To protect human life and health.
  - (2) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains.
  - (3) To 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 flood blight areas.
  - (4) To minimize expenditure of public money for costly flood control projects.
  - (5) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
  - (6) To minimize prolonged business interruptions.
  - (7) To insure that potential homebuyers are notified that property is in a flood area.

# City of Valdosta Land Development Regulations

## Section 320-2 General Provisions

- (A) Lands to Which This Ordinance Applies. This ordinance shall apply to all Areas of Special Flood Hazard within the jurisdiction of Valdosta, Georgia.
- (B) Basis for Area of Special Flood Hazard. The Areas of Special Flood Hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study (FIS), dated September 26, 2008, with accompanying maps and other supporting data and any revision thereto, are adopted by reference and declared a part of this ordinance.

For those land areas acquired by a municipality through annexation, the current effective FIS dated September 26, 2008 with accompanying maps and other supporting data and any revision thereto, for (\*unincorporated Lowndes County\*) are hereby adopted by reference.

Areas of Special Flood Hazard may also include those areas known to have flooded historically or defined through standard engineering analysis by governmental agencies or private parties but not yet incorporated in a FIS.

The Repository for public inspection of the Flood Insurance Study (FIS), accompanying maps and other supporting data is located: Engineering Department, 300 N Lee Street, City Hall Annex Bldg, 2<sup>nd</sup> Floor.

- (C) Establishment of Development Permit. A Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any Development activities.
- (D) Compliance. No structure or land shall hereafter be located, extended, converted or altered without full compliance with the terms of this ordinance and other applicable regulations.
- (E) Abrogation and Greater Restrictions. This ordinance is not intended to repeal, abrogate, or impair any existing ordinance, easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- (F) Interpretation. In the interpretation and application of this ordinance all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body, and; (3) deemed neither to limit nor repeal any other powers granted under state statutes.
- (G) Warning and Disclaimer of Liability. The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur; flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Areas of Special Flood Hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Valdosta or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.
- (H) Penalties for Violation. Failure to comply with the provisions of this ordinance or with any of its requirements, including conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a violation. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$300.00 or imprisoned for not more than 90 days, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Valdosta from taking such other lawful actions as is necessary to prevent or remedy any violation.

# City of Valdosta Land Development Regulations

## Section 320-3 Administration

- (A) Designation of Ordinance Administrator. The City of Valdosta – City Engineer is hereby appointed to administer and implement the provisions of this ordinance.
- (B) Permit Procedures. Application for a Development Permit shall be made to the City Engineer on forms furnished by the community prior to any development activities, and may include, but not be limited to the following: plans in duplicate drawn to scale showing the elevations of the area in question and the nature, location, dimensions, of existing or proposed structures, earthen fill placement, storage of materials or equipment, and drainage facilities. Specifically, the following information is required:
- (1) *Application Stage.*
    - (a) Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures.
    - (b) Elevation in relation to mean sea level to which any non-residential structure will be flood-proofed.
    - (c) Design certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the flood-proofing criteria of Section 320-4(B)(2).
    - (d) Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development.
  - (2) *Construction Stage.* For all new construction and substantial improvements, the permit holder shall provide to the Administrator an as-built certification of the regulatory floor elevation or flood-proofing level immediately after the lowest floor or flood proofing is completed. Any lowest floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same.  
  
When flood proofing is utilized for non-residential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.  
  
Any work undertaken prior to submission of these certifications shall be at the permit holder's risk.  
  
The City Engineer shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.
- (C) Duties and Responsibilities of the Administrator. Duties of the City Engineer shall include, but shall not be limited to:
- (1) Review proposed development to assure that the permit requirements of this ordinance have been satisfied.
  - (2) Review proposed development to assure that all necessary permits have been received from governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. Require that copies of such permits be provided and maintained on file.
  - (3) Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.

## City of Valdosta Land Development Regulations

- (4) When Base Flood Elevation data or floodway data have not been provided in accordance with Section 320-2(B), then the City Engineer shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other sources in order to administer the provisions of Article 4.
- (5) Review and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all new or substantially improved structures in accordance with Section 320-3(B)(2).
- (6) Review and record the actual elevation, in relation to mean sea level to which any new or substantially improved structures have been flood-proofed, in accordance with Section 320-3(B)(2).
- (7) When flood-proofing is utilized for a structure, the City Engineer shall obtain certification of design criteria from a registered professional engineer or architect in accordance with Section 320-3(B)(1) and Section 320-4(B)(2) or (D)(2).
- (8) Make substantial damage determinations following a flood event or any other event that causes damage to structures in flood hazard areas.
- (9) Notify adjacent communities and the Georgia Department of Natural Resources prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- (10) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to the FEMA to ensure accuracy of community flood maps through the Letter of Map Revision process. Assure flood carrying capacity of any altered or relocated watercourse is maintained.
- (11) Where interpretation is needed as to the exact location of boundaries of the Areas of Special Flood Hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the City Engineer shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Ordinance.
- (12) All records pertaining to the provisions of this ordinance shall be maintained in the office of the City Engineer and shall be open for public inspection.

### Section 320-4 Provisions for Flood Hazard Reduction

- (A) General Standards. In all Areas of Special Flood Hazard the following provisions are required:
- (1) New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse or lateral movement of the structure.
  - (2) New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage.
  - (3) New construction or substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage.
  - (4) **Elevated Buildings**. All New construction or substantial improvements of existing structures that include ANY fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.
    - (a) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
      - i. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.

## City of Valdosta Land Development Regulations

- ii. The bottom of all openings shall be no higher than one foot above grade.
        - iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both direction.
      - (b) So as not to violate the "Lowest Floor" criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area.
      - (c) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
  - (5) All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, 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.
  - (6) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State requirements for resisting wind forces.
  - (7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
  - (8) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
  - (9) Site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
  - (10) Any alteration, repair, reconstruction or improvement to a structure, which is not compliant with the provisions of this ordinance, shall be undertaken only if the nonconformity is not furthered, extended or replaced.
- (B) **Specific Standards.** In all Areas of Special Flood Hazard the following provisions are required:
  - (1) New construction and/or substantial improvements.
    - (a) Where base flood elevation data are available, new construction and/or substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no lower than two feet above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate equalization of flood hydrostatic forces on both sides of exterior walls shall be provided in accordance with standards of Section 320-4(A)(4), "Elevated Buildings."
    - (b) All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be elevated at or above one (1) foot above the base flood elevation.
  - (2) Non-Residential Construction. New construction and/or the substantial improvement of any structure located in A1-30, AE, or AH zones, may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to two (2) feet above the base flood elevation, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in Section 320-3(C)(6).

## City of Valdosta Land Development Regulations

- (3) Standards for Manufactured Homes and Recreational Vehicles. Where base flood elevation data are available:
- (a) All manufactured homes placed and/or substantially improved on: (1) individual lots or parcels, (2) in new and/or substantially improved manufactured home parks or subdivisions, (3) in expansions to existing manufactured home parks or subdivisions, or (4) on a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor including basement, elevated no lower than two feet above the base flood elevation.
  - (b) Manufactured homes placed and/or substantially improved in an existing manufactured home park or subdivision may be elevated so that either:
    - i. The lowest floor of the manufactured home is elevated no lower than two feet above the level of the base flood elevation, or
    - ii. The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade.
  - (c) All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. (refer to Section 320-4(A)(6) above)
  - (d) All recreational vehicles placed on sites must either:
    - i. Be on the site for fewer than 180 consecutive days.
    - ii. Be fully licensed and ready for highway use, (a recreational vehicle is ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions), or
    - iii. The recreational vehicle must meet all the requirements for "New Construction", including the anchoring and elevation requirements of Section 320-4(B)(3)(a) through Section 320-4(B)(3)(c) above.
- (4) Floodway. Located within Areas of Special Flood Hazard established in Article 2, Section B, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:
- (a) Encroachments are prohibited, including earthen fill, new construction, substantial improvements or other development within the regulatory floodway.

Development may be permitted however, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment shall not result in any increase in flood levels or floodway widths during a base flood discharge. A registered professional engineer must provide supporting technical data and certification thereof.
  - (b) Only if Section 320-4(B)(4)(a) above is satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Article 4.
- (C) Building Standards for Streams without Established Base Flood Elevations and/or Floodway (A-Zones). Located within the Areas of Special Flood Hazard established in Article 2, Section B, where streams exist but no base flood data have been provided (A-Zones), or where base flood data have been provided but a Floodway has not been delineated, the following provisions apply:

## City of Valdosta Land Development Regulations

- (1) When base flood elevation data or floodway data have not been provided in accordance with Section 320-2(B), then the City Engineer shall obtain, review, and reasonably utilize any scientific or historic base flood elevation and floodway data available from a Federal, State, or other source, in order to administer the provisions of Section 320-4. Only if data are not available from these sources, then the following provisions (2) & (3) shall apply:
- (2) No encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty feet, whichever is greater, measured from the top of the stream bank, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in more than a one (1) foot increase in flood levels during the occurrence of the base flood discharge.
- (3) In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade at the building site. (Note: Require the lowest floor to be elevated one foot above the estimated base flood elevation in A-Zone areas where a Limited Detail Study has been completed). Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of Section 320-4(A)(4) "Elevated Buildings."
  - (a) All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be elevated no less than three (3) feet above the highest adjacent grade at the building site.

The City Engineer shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

(D) Standards for Areas of Shallow Flooding (AO Zones). Areas of Special Flood Hazard established in Section 320-2(B), may include designated "AO" shallow flooding areas. These areas have base flood depths of one to three feet (1'-3') above ground, with no clearly defined channel. The following provisions apply:

- (1) All new construction and substantial improvements of residential and non-residential structures shall have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map (FIRM), above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three feet (3) above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 320-4(A)(4), "Elevated Buildings." The City Engineer shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
- (2) New construction or the substantial improvement of a non-residential structure may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to the specified FIRM flood level plus two (2) feet, above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and as required in Section 320-3(B)(1)(c) and Section 320-3(B)(2).
- (3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

(E) Standards for Subdivisions.

- (1) All subdivision and/or development proposals shall be consistent with the need to minimize flood damage.

## City of Valdosta Land Development Regulations

- (2) All subdivision and/or development proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- (3) All subdivision and/or development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (4) For subdivisions and/or developments greater than 50 lots or 5 acres, whichever is less, base flood elevation data shall be provided for subdivision and all other proposed development, including manufactured home parks and subdivisions. Any changes or revisions to the flood data adopted herein and shown on the FIRM shall be submitted to FEMA for review as a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Amendment (CLOMA), whichever is applicable. Upon completion of the project, the developer is responsible for submitting the "as-built" data to FEMA in order to obtain the final LOMR.

(F) Standards for Critical Facilities.

- (1) Critical facilities shall not be located in the 100-year floodplain or the 500-year flood plain.
- (2) All ingress and egress from any critical facility must be protected to the 500-year flood elevation.

### Section 320-5 Variance Procedures

- (A) The Mayor and City Council shall hear and decide requests for appeals or variance from the requirements of this ordinance.
- (B) The Mayor and City Council shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the City Engineer in the enforcement or administration of this ordinance.
- (C) Any person aggrieved by the decision of the Mayor and City Council may appeal such decision to the Superior Court of Lowndes County, as provided in Section 5-4-1 of the Official Code of Georgia Annotated (OCGA).
- (D) 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 to preserve the historic character and design of the structure.
- (E) Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Article are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.
- (F) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (G) In reviewing such requests, the Mayor and City Council shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this ordinance.
- (H) Conditions for Variances:
  - (1) A variance shall be issued only when there is:
    - (a) A finding of good and sufficient cause.
    - (b) A determination that failure to grant the variance would result in exceptional hardship.



## City of Valdosta Land Development Regulations

- (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 nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (2) The provisions of this Ordinance are minimum standards for flood loss reduction; therefore any deviation from the standards must be weighed carefully. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and, in the instance of a Historic Structure, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
- (3) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation of the proposed lowest floor and stating that the cost of flood insurance will be commensurate with the increased risk to life and property resulting from the reduced lowest floor elevation.
- (4) The City Engineer shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.
- (l) Upon consideration of the factors listed above and the purposes of this ordinance, the Mayor and City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

**Sections 320-6 through 320-10**

**Reserved**