

## Article 5.0 Resource Management Standards

### 5.0 Purpose

#### 5.1 Wetlands

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#### 5.5 Well Protection

### 5.0 Purpose

The purpose of this section is to ensure development in the City of Crescent City is designed and arranged to protect environmentally sensitive areas on the site and in the vicinity of the site and to locate development, where possible, in areas without environmental limitations. This section implements the policies intended to promote, preserve, and enhance the important hydrologic, biological, ecological, aesthetic, recreational, functions that waterways, drainage systems, wetland and groundwater provide.

#### 5.1. Wetlands

The City shall use a comprehensive wetland definition described in Chapter 62-340 of the Florida Administrative Code which encompasses the definitions used by the St. John's Water Management District, the Florida Department of Environmental Protection, and the U.S. Army Corps of Engineers and is based upon soils, hydrology and vegetation.

The City shall ensure the protection of natural functions of wetlands. In the interest of maintaining the ecological function of wetlands, residential densities of no more than one (1) unit per five (5) acres will be permitted within wetland areas and the total number of approved units be clustered on the least sensitive portion of the land parcel. All development will be required to provide an upland buffer.

- A. A twenty-five (25) foot buffer of vegetation, native to the site, shall be required between the construction site and the upland edge of the wetlands for new developments located adjacent to wetlands.
- B. For sites or parcels recorded on or before the date of this plan adoption, which do not contain sufficient uplands to permit development, fill and clearing of natural vegetation may be allowed only in conjunction with a minimal access way and a minimum amount beneath one residential structure and necessary supporting infrastructure such as utilities, provided the direction and rate of historical water flow are not altered.
- C. After adoption of the LDC the city shall not allow lots or parcels to be created without sufficient uplands.
- D. The location of wetlands shall be accurately identified at the time of site development review. The alteration of wetland areas is prohibited unless no other alternative exists. If alteration is necessary after it is proven no other alternative exists, it shall be permitted by the appropriate state/federal agency and if required accompanied by a mitigation plan to replace the functional value lost by the impact. The purpose of mitigation is to ensure the ecological value of the wetlands is maintained. The plan must provide the city with assurances the mitigation plan will be maintained.

## 5.2. Aquatic Vegetation

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A permit is required within the City of Crescent City as described below:

- A. No person shall control, eradicate, destroy, remove, or otherwise alter any aquatic weeds, plants or vegetation found within any wetland or within any waters within the city unless a permit for such activity has been issued by the Florida Department of Environmental Protection, or unless the activity is in waters expressly exempted by DEP rule or is expressly exempted in subsection 5.2.B. below. Residents may control, eradicate, destroy or remove exotic nuisance species without any permits.
- B. A riparian owner may physically or mechanically remove herbaceous aquatic plants and semi-woody herbaceous plants, such as shrub species and willow, within an area delimited by up to fifty (50) percent of the property owner's frontage or fifty (50) feet, whichever is less, and by a sufficient length waterward from, and perpendicular to, the riparian owner's shoreline to create a corridor to allow access for a boat or swimmer to reach open water. All unvegetated areas shall be cumulatively considered when determining the width of the exempt corridor. Physical or mechanical removal does not include any activity that requires a permit pursuant to F.S. Ch. 373, part IV.

## 5.3. Flood Prone Areas Standards

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### 5.3.1. Scope

The provisions of this subsection shall apply to all development wholly within or partially within any flood hazard area, including but not limited to the subdivision of land: filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities exempt from the Florida Building Code, as amended; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development. Section 5.3.19(A)(1) and Section 5.3.20(D) shall apply to areas outside of the flood hazard area established in Section 5.3.8.

### 5.3.2. Purpose

The purposes of this subsection and the flood load and flood resistant construction requirements of the Florida Building Code, as amended, are to establish minimum requirements to safeguard the public health, safety, and general welfare and to minimize public and private losses due to flooding through regulation of development in flood hazard areas to:

- (a) Minimize unnecessary disruption of commerce, access, and public service during times of flooding.
- (b) Require the use of appropriate construction practices to prevent or minimize future flood damage.
- (c) Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential.
- (d) Manage the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain.
- (e) Minimize damage to public and private facilities and utilities
- (f) Help maintain a stable tax base by providing sound use and development of flood hazard areas.
- (g) Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events.

- (h) Meet the requirements of the National Flood Insurance Program for community participation as set forth in the Title 44 Code of Federal Regulations, Section 59.22.
- (i) Protect the hydraulic characteristics of the small watercourses, including gulches, sloughs and artificial water channels used for conveying floodwaters; and
- (j) Protect individuals from purchasing flood prone lands for unsuitable purposes.

#### **5.3.3. Coordination with the Florida Building Code**

This subsection is to be administered and enforced in conjunction with the Florida Building Code, as amended. Where cited, ASCE 24 refers to the edition of the standard referenced by the Florida Building Code, as amended.

#### **5.3.4. Warning**

The degree of flood protection required by this subsection and the Florida Building Code, as amended by the City and from time-to-time, is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by human-caused or natural causes. This subsection does not imply land outside of mapped special flood hazard areas, or uses permitted within such flood hazard areas, will be free from flooding or flood damage. The flood hazard areas and base flood elevations contained in the Flood Insurance Study and shown on Flood Insurance Rate Maps and the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60 may be revised by the Federal Emergency Management Agency, requiring the City to revise these regulations to remain eligible for participation in the National Flood Insurance Program. No guaranty of vested use, existing use, or future use is implied or expressed by compliance with this subsection.

#### **5.3.5. Disclaimer of Liability**

This subsection shall not create liability on the part of the City Commission of the City of Crescent City or by any officer or employee thereof for any flood damage resulting from reliance on or compliance with this subsection or any administrative decision lawfully made thereunder.

#### **5.3.6. Applicability**

Areas to which this subsection applies. This subsection shall apply to all flood hazard areas within the City of Crescent City, as established in Section 5.3.8.

#### **5.3.7 General**

Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

#### **5.3.8 Basis for establishing flood hazard areas.**

The Flood Insurance Study for Putnam County, Florida and Incorporated Areas dated February 2, 2012, and all subsequent amendments and revisions, and the accompanying Flood Insurance Rate Maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this subsection and shall serve as the minimum basis for establishing flood hazard areas.

##### **5.3.8.1 Submission of additional data to establish flood hazard areas.**

To establish flood hazard areas and base flood elevations, pursuant to Section 5.3.14 the Floodplain Administrator may require submission of additional data. Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the City indicates ground elevations are:

- A. Below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as flood hazard area and subject to the requirements of this subsection and, as applicable, the requirements of the Florida Building Code, as amended.
- B. Above the closest applicable base flood elevation, the area shall be regulated as a special flood hazard area unless the owner or owner's authorized agent (the "applicant") obtains a letter of map change removing the area from the special flood hazard area.

#### **5.3.9 Other laws**

The provisions of this subsection shall not be deemed to nullify any provisions of local, state, or federal law.

#### **5.3.10 Abrogation and greater restrictions**

These regulations supersede any ordinances or regulations previously in effect for management of development in flood hazard areas. However, it is not intended to repeal or abrogate any existing ordinances including but not limited to this land development code, zoning ordinances, stormwater management regulations, or the Florida Building Code, as amended. In the event of a conflict between the requirements of this subsection and any other ordinances, the more restrictive shall govern. These regulations shall not impair any deed restriction, covenant or easement, but any land subject to such interests shall also be governed by this subsection.

#### **5.3.11 Interpretation**

In the interpretation and application of this subsection, 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.

#### **5.3.12 Duties and powers of the floodplain administrator**

- A. *Designation.* The City Manager is designated as the Floodplain Administrator. The Floodplain Administrator may delegate performance of certain duties to others.
- B. *General.* The Floodplain Administrator is authorized and directed to administer and enforce the provisions of this subsection. The Floodplain Administrator shall have the authority to render interpretations of this subsection consistent with the intent and purpose of this subsection and may establish policies and procedures to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this subsection without the granting of a floodplain development variance pursuant to Section 5.3.16.
- C. *Applications, permits, and approvals.* The Floodplain Administrator, in coordination with other pertinent offices of the City, shall:
  - 1. Review applications and plans to determine whether proposed new development will be in flood hazard areas.
  - 2. Review applications for modification of any existing development in flood hazard areas for compliance with the requirements of this subsection.
  - 3. Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries; a person contesting the determination shall have the opportunity to appeal the interpretation.

4. Provide available flood elevation and flood hazard information.
  5. Determine whether additional flood hazard data is needed from other sources or shall be developed by an applicant.
  6. Review applications to determine whether proposed development will be reasonably safe from flooding.
  7. Issue floodplain development permits or approvals for development other than buildings and structures subject to the Florida Building Code, as amended, including buildings, structures and facilities exempt from the Florida Building Code, as amended, when compliance with this subsection is demonstrated, or disapprove the same in the event of noncompliance; and
  8. Coordinate with and provide comments to the Building Official to assure applications, plan reviews, and inspections for buildings and structures in flood hazard areas comply with the applicable provisions of this subsection.
- D. *Substantial improvement and substantial damage determinations.* For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:
1. Estimate the market value of the building or structure using the building value less any miscellaneous improvements or accessory structures from the appraised value as assessed by the Putnam County Property Appraiser's office, plus twenty (20) percent before the start of construction of the proposed work, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure 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;
  2. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure. Upon the request of the Floodplain Administrator, the applicant shall provide a detailed valuation of all labor and materials for the construction project and all costs necessary to evaluate the substantial improvement and substantial damage requirements.
  3. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
  4. Notify the applicant if it is determined the work constitutes substantial improvement or repair of substantial damage and compliance with the flood resistant construction requirements of the Florida Building Code, as amended, and this subsection is required.
- E. *Modification of the strict application of the requirements of the Florida Building Code.* The Floodplain Administrator shall review requests submitted to the Building Official requesting approval to modify the strict application of the flood load and flood resistant construction requirements of the Florida Building Code, as amended, to determine whether such requests require the granting of a floodplain development variance pursuant to Section 5.3.5.16.
- F. *Notices and orders.* The Floodplain Administrator shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this subsection.

- G. *Inspections.* The Floodplain Administrator shall make the required inspections as specified in Section 5.3.15(F) for development not subject to the Florida Building Code, as amended, including buildings, structures and facilities exempt from the Florida Building Code, as amended. The Floodplain Administrator shall inspect flood hazard areas to determine if development occurred without issuance of a permit.
- H. *Other duties of the Floodplain Administrator.* The Floodplain Administrator shall have other duties, including but not limited to:
1. Establish, in coordination with the Building Official, procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to Section 5.3.16(D);
  2. Require applicants proposing alteration of a watercourse notify adjacent communities and the Florida Division of Emergency Management, State Floodplain Management Office, and submit copies of such notifications to FEMA.
  3. Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the Flood Insurance Rate Maps if the analyses propose to change base flood elevations, flood hazard area boundaries, or floodway designations; such submissions shall be made within six months of such data becoming available.
  4. Review required design certifications and documentation of elevations specified by this subsection and the Florida Building Code, as amended, to determine the completion of certifications and documentations; and
  5. Notify FEMA when the corporate boundaries of the City of Crescent City are modified.
- I. *Floodplain management records.* Regardless of any limitation on the period required for retention of public records, the Floodplain Administrator shall maintain and permanently keep and make available for public inspection all records necessary for the administration of this subsection and the flood resistant construction requirements of the Florida Building Code, as amended, including Flood Insurance Rate Maps; Letters of Map Change; records of issuance of permits or approval and denial of permits or approvals; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations specified by the Florida Building Code, as amended, and this subsection; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances of the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances from floodplain development requirements, including justification for issuance or denial; and records of enforcement actions taken pursuant to this subsection, and the flood resistant construction requirements of the Florida Building Code, as amended.

### **5.3.13 Permits or Approvals**

- A. *Permits or approvals required.* Any applicant who intends to undertake any development activity within the scope of this subsection, including buildings, structures and facilities exempt from the Florida Building Code, as amended, which is wholly within or partially within any flood hazard area shall make application to the Floodplain Administrator, and the Building Official if applicable, and shall obtain the required permit(s) or approval(s). No such permit or approval shall be issued until compliance with the requirements of this subsection and all other applicable codes and regulations have been satisfied.
- B. *Floodplain development permits or approvals.* Floodplain development permits or approvals shall be issued pursuant to this subsection for any development activities not subject to the requirements of the Florida Building Code, as amended, including buildings, structures and facilities exempt from the



Florida Building Code, as amended. Depending on the nature and extent of proposed development, to include a building or structure, the Floodplain Administrator may determine a floodplain development permit or approval is required in addition to a building permit.

- C. *Buildings, structures and facilities exempt from the Florida Building Code.* Pursuant to the requirements of federal regulation for participation in the National Flood Insurance Program (44 C.F.R. Sections 59 and 60), floodplain development permits or approvals shall be required for the following buildings, structures and facilities exempt from the Florida Building Code, as amended, and any further exemptions provided by law, which are subject to the requirements of this subsection:
1. Railroads and ancillary facilities associated with the railroad.
  2. Nonresidential farm buildings on farms, as provided in Section 604.50, Florida Statutes.
  3. Temporary buildings or sheds used exclusively for construction purposes.
  4. Mobile or modular structures used as temporary offices.
  5. Those structures or facilities of electric utilities, as defined in F.S. § 366.02, directly involved in the generation, transmission, or distribution of electricity.
  6. Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term "chickee" means an open-sided wooden hut with a thatched roof of palm or palmetto or other traditional materials, and does not incorporate any electrical, plumbing, or other non-wood features.
  7. Family mausoleums not exceeding two hundred and fifty (250) square feet in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete.
  8. Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system; or
  9. Structures identified in F.S. § 553.73(10)(k), are not exempt from the Florida Building Code, as amended, if such structures are in flood hazard areas established on Flood Insurance Rate Maps.
- D. *Application for a permit or approval.* To obtain a floodplain development permit or approval, the applicant shall first file an application in writing on a form furnished by the City. The information provided shall:
1. Identify and describe the development to be covered by the permit or approval.
  2. Describe the land on which the proposed development is to be conducted by legal description, street address or similar description readily identifying and definitively locating the site.
  3. Indicate the use and occupancy for which the proposed development is intended.
  4. Be accompanied by a site plan or construction documents as specified in Section 5.3.14.
  5. State the valuation of the proposed work.
  6. Be signed by the applicant.
  7. Give other data and information as required by the Floodplain Administrator.
- E. *Validity of permit or approval.* The issuance of a floodplain development permit or approval for development located in a flood hazard area pursuant to this subsection shall not be construed to be a permit for, or approval of, any violation of this subsection, the Florida Building Code, as amended, or any other ordinances or regulations of the City. The issuance of permits or approvals based on submitted applications, construction documents, and information shall not prevent the Floodplain Administrator from requiring the correction of errors and omissions.

- F. *Expiration.* Approval for development located in a flood hazard area shall become invalid unless the work authorized by such permit or approval is commenced within one hundred and eighty (180) days after its issuance, or if the work authorized is suspended or abandoned for a period of one hundred and eighty (180) days after the work commences. Extensions for periods of not more than one hundred and eighty (180) days each shall be submitted to the Floodplain Administrator in writing and good cause shall be demonstrated.
- G. *Suspension or revocation.* The Floodplain Administrator, or their designee, is authorized to suspend or revoke a floodplain development permit or approval if the permit or approval was issued in error, because of incorrect, inaccurate or incomplete information, or in violation of this subsection or any other ordinance, regulation or requirement of the City.
- H. *Other permits or approvals required.* Floodplain development permits or approvals shall include a condition stating all other applicable state or federal permits be obtained before commencement of the permitted development, including but not limited to the following:
  - 1. The St. Johns River Water Management District; F.S. § 373.036.
  - 2. Florida Department of Health for onsite sewage treatment and disposal systems; F.S. § 381.0065, and Chapter 64E-6, Florida Administrative Code.
  - 3. Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; F.S. § 161.055.
  - 4. Florida Department of Environmental Protection for activities affecting wetlands and alter surface water flows, in conjunction with the U.S. Army Corps of Engineers; Section 404 of the Clean Water Act.
  - 5. Federal permits and approvals.

#### **5.3.14 Site Plans and Constriction Documents**

- A. *Information for development in flood hazard areas.* The site plan or construction documents for any development subject to the requirements of this subsection shall be drawn to scale and shall include, as applicable to the proposed development:
  - 1. Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.
  - 2. Where base flood elevations or floodway data are not included on the FIRM or in the Flood Insurance Study, they shall be established in accordance with Section 5.3.14(B)(2) or Section 5.3.14(B)(3).
  - 3. Where the parcel on which the proposed development will take place will have more than fifty (50) lots or is larger than five (5) acres, and the base flood elevations are not included on the FIRM or in the Flood Insurance Study, such elevations shall be established in accordance with Section 5.3.14(B)(1).
  - 4. Location of the proposed activity and proposed structures, and locations of existing buildings and structures.
  - 5. Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
  - 6. Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence showing the proposed fill areas are the minimum necessary to achieve the intended purpose.
  - 7. Existing and proposed alignment of any proposed alteration of a watercourse.
  - 8. The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data required by this subsection, but not required to be prepared by a



registered design professional if the nature of the proposed development is such that the review of such submissions is not necessary to ascertain compliance with this subsection.

B. *Information in flood hazard areas without base flood elevations (approximate Zone A).* Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Floodplain Administrator shall:

1. Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices.
2. Obtain, review, and provide to applicant's base flood elevation and floodway data available from a federal or state agency or other source, such as the U.S. Army Corps of Engineers or the Suwannee River Water Management District, or require the applicant to obtain and use base flood elevation and floodway data available from a federal or state agency or other source.
3. Where base flood elevation and floodway data are not available from another source, and the available data is deemed by the Floodplain Administrator to not reasonably reflect flooding conditions, or where the available data is known to be scientifically or technically incorrect or otherwise inadequate:
  - a. Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices; or
  - b. Specify the base flood elevation is four (4) feet above the highest adjacent grade at the location of the development, provided there is no evidence indicating flood depths have been or may be greater than two (2) feet.
  - c. Where the base flood elevation data are to be used to support a letter of map change from FEMA, advise the applicant the analyses shall be prepared by a Florida licensed engineer in a format required by FEMA, and it shall be the responsibility of the applicant to satisfy the submittal requirements and pay the processing fees.

C. *Additional analyses and certifications.* As applicable to the location and nature of the proposed development activity, and in addition to the requirements of this section, the applicant shall submit the following analyses signed and sealed by a Florida licensed engineer at such time the site plan and construction documents are submitted to the City:

1. For development activities proposed to be in a regulatory floodway, a floodway encroachment analysis demonstrating the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities resulting in an increase to the base flood elevations, the applicant shall submit such analysis to FEMA as specified in Section 5.3.14(D). and shall submit the conditional letter of map revision, if issued by FEMA, with the site plan and construction documents.
2. For development activities proposed to be located in a riverine flood hazard area for which base flood elevations are included in the Flood Insurance Study or on the FIRM and floodways have not been designated, hydrologic and hydraulic analyses demonstrating the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than one foot at any point within the City. This requirement does not apply in isolated flood hazard areas not connected to a riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.
3. For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity; the applicant shall submit the analysis to FEMA as specified in Section 5.3.14(D).

- D. *Submission of additional data.* When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a Florida licensed engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant.

#### **5.3.15 Inspections**

- A. *General.* Development for which a floodplain development permit or approval is required shall be subject to inspection.
- B. *Development other than buildings and structures.* The Floodplain Administrator shall inspect all developments to determine compliance with the requirements of this subsection and the conditions of issued floodplain development permits or approvals.
- C. *Buildings, structures and facilities exempt from the Florida Building Code.* The Floodplain Administrator shall inspect buildings, structures and facilities exempt from the Florida Building Code, as amended, to determine compliance with the requirements of this subsection and the conditions of issued floodplain development permits or approvals.
- D. *Buildings, structures and facilities exempt from the Florida Building Code, lowest floor inspection.* Upon placement of the lowest floor, including basement, and prior to further vertical construction, the owner of a building, structure or facility exempt from the Florida Building Code, as amended, or the owner's authorized agent, shall submit to the Floodplain Administrator:
1. If a design flood elevation was used to determine the required elevation of the lowest floor, the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor; or
  2. If the elevation used to determine the required elevation of the lowest floor was determined in accordance with Section 5.3.14(B)(3)(b) the documentation of height of the lowest floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.
- E. *Buildings, structures and facilities exempt from the Florida Building Code, final inspection.* As part of the final inspection, the owner or owner's authorized agent shall submit to the Floodplain Administrator a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade; such certifications and documentations shall be prepared as specified in Section 5.3.15(D).
- F. *Manufactured homes.* The Floodplain Administrator shall inspect manufactured homes installed or replaced in flood hazard areas to determine compliance with the requirements of this subsection and the conditions of the issued permit or approval. Upon placement of a manufactured home, certification of the elevation of the lowest floor shall be submitted to the Floodplain Administrator.

#### **5.3.16 Floodplain Development Variances and Appeals**

- A. *General.* The Planning & Zoning Commission shall hear and decide on requests for appeals and requests for variances from the strict application of this subsection. Pursuant to F.S. § 553.73(5), the Board of Adjustment shall hear and decide on requests for appeals and requests for variances from the strict application of the flood resistant construction requirements of the Florida Building Code, as amended.
- B. *Appeals.* The Planning & Zoning Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the administration and enforcement of this subsection. Any person aggrieved by the decision of the

Planning & Zoning Commission may appeal such decision to the City Commission and subsequently the Circuit Court if desired, as provided by Florida Statutes.

- C. *Limitations on authority to grant floodplain development variances.* The Planning & Zoning Commission shall base its decisions on floodplain development variances on technical justifications submitted by applicants, the considerations for issuance in Section 5.3.16(G)(7), the conditions of issuance set forth in Section 5.3.16(G), and the comments and recommendations of the Floodplain Administrator and the Building Official. The Planning & Zoning Commission has the right to attach such conditions as it deems necessary to further the purposes and objectives of this subsection.
- D. *Restrictions in floodways.* A floodplain development variance shall not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in Section 5.3.14(C).
- E. *Historic buildings.* A floodplain development variance may be granted for the repair, improvement, or rehabilitation of a historic building determined eligible for the exception to the flood resistant construction requirements of the Florida Building Code, Existing Building, Chapter 12 Historic Buildings, as amended, upon a determination the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the floodplain development variance is the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a floodplain development variance shall not be granted and the building and any repair, improvement, and rehabilitation shall be subject to the requirements of the Florida Building Code, as amended.
- F. *Functionally dependent uses.* A floodplain development variance may be granted for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this subsection, provided the floodplain development variance meets the requirements of Section 5.3.16(D) is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials to minimize flood damage during occurrence of the base flood.
- G. *Standards for issuance of floodplain development variances.* In reviewing requests for floodplain development variances, the Planning & Zoning Commission shall consider all technical evaluations, all relevant factors, all other applicable provisions of the Florida Building Code, as amended, this subsection, and the following:
  - 1. The danger of materials and debris swept onto other lands resulting in further injury or damage.
  - 2. The danger to life and property due to flooding or erosion damage.
  - 3. The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners.
  - 4. The importance of the services provided by the proposed development to the City.
  - 5. The availability of alternate locations for the proposed development subject to lower risk of flooding or erosion.
  - 6. The compatibility of the proposed development with existing and anticipated development.
  - 7. The relationship of the proposed development to the comprehensive plan and floodplain management program for the area.
  - 8. The safety of access to the property in times of flooding for ordinary and emergency vehicles.
  - 9. The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
  - 10. 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, streets and bridges.
- H. *Conditions for issuance of floodplain development variances.* Floodplain development variances shall be issued only upon all the following conditions being met:

1. Submission by the applicant, of a showing of good cause considering the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this subsection or the required elevation standards.
2. Determination and finding by the Planning and Zoning Commission that the standards for issuance of a floodplain development permit or approval provided in Section 5.3.16(G) cannot be met, and:
  - a. Failure to grant the floodplain development variance would result in exceptional hardship due to the physical characteristics of the land rendering the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship.
  - b. The granting of a floodplain development variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances; and
  - c. The floodplain development variance is the minimum necessary, considering the flood hazard, to afford relief.
3. Receipt of a signed statement by the applicant indicating the floodplain development variance, if granted, shall be recorded in the Office of the Clerk of the Court, and the recording fees incurred by the applicant, in such a manner to appear in the chain of title of the affected parcel of land; and
4. If the request is for a floodplain development variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the Floodplain Administrator to the applicant for the floodplain development variance, specifying the difference between the base flood elevation and the proposed elevation of the lowest floor, stating the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation (up to amounts as high as \$25.00 for \$100.00 of insurance coverage), and stating construction below the base flood elevation increases risks to life and property.

#### **5.3.17 Violations**

- A. *Violations* Any development not within the scope of the Florida Building Code, as amended, but regulated by this subsection performed without an issued permit or approval, conflicts with an issued permit or approval, or does not fully comply with this subsection, shall be deemed a violation of this subsection. A building or structure without the documentation of elevation of the lowest floor, other required design certifications, or other evidence of compliance required by this subsection or the Florida Building Code, as amended, is presumed to be a violation until such time as the documentation is provided.
- B. *Authority*. For development not within the scope of the Florida Building Code, as amended, but regulated by this subsection and determined to be a violation, the Floodplain Administrator is authorized to serve notices of violation or stop work orders to owners of the property involved, to the owner's agent, or to the person or persons performing the work.
- C. *Unlawful continuance*. Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as the person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed by law.

#### **5.3.18 Buildings and Structures**

- A. *Design and Construction Exempt from the Florida Building Code*. Pursuant to Section 5.3.15(C), buildings, structures, and facilities exempt from the Florida Building Code, as amended, including

substantial improvement or repair of substantial damage of such buildings, structures and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures, not walled and roofed buildings, exempt from the Florida Building Code, as amended, shall comply with the requirements of Section 5.3.24.

- B. *Elevation requirements for site built one- and two-family dwellings and modular homes installed off-frame.* All sites built one- and two-family dwellings and modular homes installed off-frame and located in flood hazard areas shall be constructed as follows:
1. Flood Zone A and AE with base flood elevation. The lowest floor of enclosed spaces is elevated to a minimum of one (1) foot above the base flood elevation. All construction below this required elevation must be of flood resistant materials.
  2. Flood Zone A with undetermined base flood elevation. The lowest floor of enclosed spaces is elevated to a minimum of three (3) feet above the highest adjacent grade. All construction below this required elevation must be of flood resistant materials.
  3. Enclosed areas permitted below the required elevation. The lowest floor of enclosed areas used solely for parking of vehicles, building access, or storage may be constructed below the required elevation provided these areas are constructed with flood ventilation openings complying with the Florida Building Code, Residential. All construction below the required elevation must be of flood resistant materials.
- C. *Accessory structures. Accessory structures are permitted below the base flood elevation provided the accessory structures are used only for parking or storage and:*
1. Are one-story and not larger than six hundred (600) square feet.
  2. Have flood openings in accordance with section R322.2 of the Florida Building Code, Residential.
  3. Are anchored to resist flotation, collapse, or lateral movement resulting from flood loads.
  4. Have flood damage-resistant materials used below the base flood elevation plus one (1) foot.
  5. Have mechanical, plumbing and electrical systems, including plumbing fixtures, elevated to or above the base flood elevation plus one foot.

### 5.3.19 Subdivisions

- A. *Minimum requirements.* Subdivision proposals, including proposals for manufactured home parks and subdivisions, shall be reviewed to ensure all the following are met:
1. No building or structure shall be in flood hazard areas where other alternatives for the location of such structures exist on the site.
  2. Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding.
  3. All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage.
  4. Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures; and
  5. In any area outside of the flood hazard area where a perennial watercourse is present, no building or fill shall be located within the stream bank equal to five times the width of the watercourse at the top of the bank or thirty-five (35) feet, whichever is greater.
- B. *Subdivision plats.* Where any portion of proposed subdivisions, including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:
1. Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats and final plats.

2. Where the subdivision has more than fifty (50) lots or is larger than five (5) acres and base flood elevations are not included on the FIRM, the base flood elevations determined in accordance with Section 5.3.14(B)(1).
3. The elevation of proposed structures and pads.
4. If the site is filled above the base flood elevation, the final pad elevation shall be certified by a Florida licensed professional surveyor.
5. Compliance with the site improvement and utilities requirements of Section 5.3.20; and
6. The following flood hazard warning is displayed on the plat: "FLOOD HAZARD WARNING: This property may be subject to flooding. You should contact the City Floodplain Administrator and obtain the latest information about flood elevations and restrictions before making plans for the use of this land."

### **5.3.20 Site Improvements, Utilities and Limitations**

- A. *Minimum requirements.* All proposed new development shall be reviewed to ensure all the following are met:
  1. No building or structure shall be in flood hazard areas where other alternatives for the location of such structures exist on the site.
  2. Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding.
  3. All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
  4. Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.
- B. *Sanitary sewage facilities.* All new and replacement sanitary sewage facilities, private sewage treatment plants (including all pumping stations and collector systems), and on-site waste disposal systems shall be designed in accordance with the standards for onsite sewage treatment and disposal systems in Chapter 64E-6, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into flood waters, and impairment of the facilities and systems.
- C. *Water supply facilities.* All new and replacement water supply facilities shall be designed in accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwater into the systems.
- D. *Encroachment limitations.* In flood hazard areas without base flood elevations (approximate Zone A), no encroachments including fill material and structures shall be located within the stream bank equal to five (5) times the width of the watercourse at the top of the bank or thirty-five (35) feet for all perennial watercourses, whichever is greater. In any area outside of a flood hazard area (Zone B, C, or X) where a perennial water course is present, no building or fill shall be located within the bank equal to thirty-five (35) feet.
- E. *Limitations on sites in regulatory floodways.* No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in Section 5.3.14(C)(1) demonstrates the proposed development or land disturbing activity will not result in any increase in the base flood elevation.
- F. *Limitations on placement of fill.* Subject to the limitations of this subsection, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements,



if intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the Florida Building Code, as amended.

#### **5.3.21 Manufactured Homes**

- A. *General.* All manufactured homes permitted in flood hazard areas shall be installed by an installer licensed pursuant to F.S. § 320.8249 and shall comply with the requirements of Chapter 15C-1, F.A.C. and the requirements of this subsection.
- B. *Foundations.* All new manufactured homes and replacement manufactured homes installed in flood hazard areas shall be installed on permanent, reinforced foundations designed in accordance with the foundation requirements of the Florida Building Code Residential Section R322.2, as amended, and this subsection. Foundations for manufactured homes subject to Section 5.3.21(F) are permitted to be reinforced piers or other foundation elements of at least equivalent strength.
- C. *Anchoring.* All new manufactured homes and replacement manufactured homes shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. This anchoring requirement is in addition to applicable state and local anchoring requirements for wind resistance.
- D. *Elevation.* Manufactured homes placed, replaced, or substantially improved shall comply with Section 5.3.21(E) or Section 5.3.21(F), as applicable.
- E. *General elevation requirement.* Unless subject to the requirements of Section 5.3.21(F), all manufactured homes placed, replaced, or substantially improved shall be elevated such that the bottom of the frame is at or above the elevation required, as applicable to the flood hazard area, in the Florida Building Code, Residential Section R322.2 (Zone A), as amended on sites located:
  - 1. In an expansion to an existing manufactured home park or subdivision; or
  - 2. In an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood.
- F. *Elevation requirement for certain existing manufactured home parks and subdivisions.* Manufactured homes not subject to 5.3.21(E), including manufactured homes placed, replaced, or substantially improved on sites located in an existing manufactured home park or subdivision, unless on a site where substantial damage as result of flooding has occurred, shall be elevated such that either the:
  - 1. Bottom of the frame of the manufactured home is at or above the elevation required in the Florida Building Code, Residential Section R322.2 (Zone A), as amended; or
  - 2. Bottom of the frame is supported by reinforced piers or other foundation elements of at least equivalent strength not less than thirty-six (36) inches in height above grade.
- G. *Enclosures.* Enclosed areas below elevated manufactured homes shall comply with the requirements of the Florida Building Code, Residential Section R322.2, as amended, for such enclosed areas.
- H. *Utility equipment.* Utility equipment serving manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the Florida Building Code, Residential Section R322, as amended.

#### **5.3.22 Recreational Vehicles and Park Trailers**

- A. *Temporary placement.* Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:
  - 1. Be on the site for fewer than one hundred and eighty (180) consecutive days; or
  - 2. Be fully licensed and ready for highway use, which means the recreational vehicle or park model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and

security devices, and has no permanent attachments such as additions, rooms, stairs, decks, and porches.

- B. *Permanent placement.* Recreational vehicles and park trailers not meeting the limitations in Section 5.3.22(A)(1) for temporary placement shall meet the requirements of Section 5.3.21 for manufactured homes.

### 5.3.23 Tanks

- A. *Underground tanks.* Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty.
- B. *Above-ground tanks not elevated.* Above-ground tanks not meeting the elevation requirements of Section 5.3.23(C) shall be permitted in flood hazard areas provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.
- C. *Above-ground tanks, elevated.* Above-ground tanks in flood hazard areas shall be attached to an elevated or above the design flood elevation on a supporting structure designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area.
- D. *Tank inlets and vents.* Tank inlets, fill openings, outlets and vents shall be:
  - 1. At or above the design flood elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
  - 2. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

### 5.3.24 Other Development

- A. *General requirements for other development.* All development, including human-caused changes to improved or unimproved real estate for which specific provisions are not specified in this subsection or the Florida Building Code, as amended, shall:
  - 1. Be located and constructed to minimize flood damage.
  - 2. Meet the limitations of Section 5.3.20(E) if located in a regulated floodway.
  - 3. Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.
  - 4. Be constructed of flood damage-resistant materials; and,
  - 5. Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, except the minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.
- B. *Residential accessory structures.* The anchoring requirements of Section 5.3.24(A) may be satisfied by bolting the structure to a concrete slab or by over-the-top ties. When bolted to a concrete slab, one-half inch bolts shall be installed six (6) feet on center, with a minimum of two (2) bolts per side, with a force adequate to secure the structure.
- C. *Fences in regulated floodways.* Fences in regulated floodways with the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Section 5.3.20(E).

- D. *Retaining walls, sidewalks and driveways in regulated floodways.* Retaining walls and sidewalks and driveways involving the placement of fill in regulated floodways shall meet the limitations of Section 5.3.20(E).
- E. *Roads and watercourse crossings in regulated floodways.* Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, encroaching into regulated floodways shall meet the limitations of Section 5.3.20(E). Alteration of a watercourse that is a part of a road or watercourse crossing shall meet the requirements of Section 5.3.14(C)(3).

## 5.4 Stormwater Management

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### 5.4.1 Purpose

The purpose of this subsection is to preserve the water resources of the City, which are critical to the public health, safety, and welfare of its citizens; to control stormwater runoff to prevent erosion, sedimentation, and flooding, and to encourage recharge of the aquifer upon which the public depends for potable fresh water.

- A. The intent of these design standards is to encourage environmentally sound stormwater management practices; they should go beyond simply providing drainage facilities. Emphasis should be placed on the use of upland facilities for stormwater control and groundwater recharge. Developments sacrificing recharge and upland controls in order to maximize the number of lots will not be allowed. The City's stormwater management perspective includes the control of both water quantity and water quality.
- B. The requirements hereafter are designed to allow landowners reasonable use of their property while promoting the following objectives:
  - 1. To prevent loss of life and significant loss of property due to flooding.
  - 2. To protect, restore, and maintain the chemical, physical and biological quality of ground and surface waters.
  - 3. To encourage productive and enjoyable harmony between humanity and nature.
  - 4. To prevent individuals, business entities, and governmental entities from causing harm to the community by activities which adversely affect water resources.
  - 5. To encourage the protection of wetlands and other natural systems and the use of those natural systems in ways which do not impair their beneficial functioning.
  - 6. To minimize the transport of sediments and pollutants to surface waters.
  - 7. To protect, restore and maintain the habitat of fish and wildlife.
  - 8. To perpetuate natural groundwater recharge.
  - 9. To encourage the use of drainage systems which minimize the consumption of electrical energy or petroleum fuels to move water, remove pollutants, or maintain the system.
  - 10. To ensure the attainment of these objectives by requiring approval and implementation of water management plans for all activities which may have an adverse effect upon groundwater and surface water.

### 5.4.2 Permit Required

- A. The requirements of this chapter apply to all areas in the City and shall be satisfied completely prior to final project approval by the City.
- B. No person shall conduct a development activity, subdivide, make any change in the use of land, construct any stormwater management system, or structure, or change the size of an existing structure or system, except as exempted later in this chapter, without first obtaining approval from the City as provided herein.

- C. Approval of the stormwater management plans shall be contingent on approval of any required permit from the St. Johns River Water Management District; however, approval by SJRWMD will not result in automatic approval of the stormwater management plans by the City.

#### **5.4.3 Exemptions**

All activities which are exempt from permitting per SJRWMD regulations shall be exempted from further consideration under the provisions set forth herein.

#### **5.4.4 Performance Standards**

The stormwater management system design shall conform to the following standards:

- A. Projects shall be designed for stormwater discharges to meet, at a minimum, the water quality criteria set forth by the St. Johns River Water Management District, Applicant's Handbook, Management and Storage of Surface Waters, in order to achieve the state water quality standards established by the Florida Department of Environmental Protection in Chapter 17-3, Florida Administrative Code, or as amended.
- B. Wetlands shall only be used for stormwater treatment as allowed by SJRWMD criteria, providing one-half ( $\frac{1}{2}$ ) of the required treatment volume is retained in an offline pollution abatement pond in order to skim the first flush prior to discharge into the wetland. The applicant must provide assurance this offline retention will not deprive the wetland of water which will alter the hydroperiod.

#### **5.4.5 Design Criteria**

- A. Runoff Volume and Peak Rate:

The discharge hydrograph produced for a developed or redeveloped site shall not exceed, in terms of peak flow and total volume, the hydrograph produced by conditions existing before development or redevelopment for a 24-hour, 25-year frequency storm. The peak discharge resulting from a 24-hour, 100-year frequency storm on the developed or redeveloped site shall not exceed the peak discharge resulting from a 100-year frequency storm for existing conditions on the site. Rainfall frequency, duration, and distribution for stormwater management systems are to be in accordance with the SJRWMD Applicant's Handbook.

- B. Water quality:

- 1. All developments will treat the required pollution abatement volume prior to discharge to receiving waters. When pollution abatement volumes and detention volumes to reduce the peak rate of discharge are incorporated into one (1) facility, the volume of water impounded to reduce peak discharges in excess of the pollution abatement volume must be discharged by a positive, non-filtering system.
- 2. The pollution abatement volume and treatment method shall be as required by SJRWMD, 40C-42, except sites utilizing a Wetlands Stormwater Management System must treat one-half ( $\frac{1}{2}$ ) of the required volume in an offline detention pond before discharging into the wetland.

- C. Peak rate and volume attenuation:

- 1. Peak rate and volume attenuation shall be as required in the SJRWMD regulations.
- 2. Credit for seepage through the pond bottom to further reduce the peak rate of discharge, or runoff volume, will not be allowed unless accompanied by supporting documentation prepared by a professional engineer.

- D. Development within flood prone areas (100-Year flood). All development within flood prone areas as delineated on the official National Flood Insurance Program, Flood Insurance Rate Maps, or the latest

and best information available, shall comply with the requirements of SJRWMD and the criteria in 5.3. Flood Prone Areas Standards.

E. Retention/detention pond requirements:

1. Side slopes shall be designed per SJRWMD regulations.
2. Maintenance berms shall have slopes no steeper than one (1) foot vertically for every twenty (20) feet horizontally.
3. Where retention/detention areas are located on the project periphery, the developer may be required to provide additional landscaping or screening to adequately protect abutting properties, not including right-of-way.
4. Fenced stormwater facilities are discouraged within the City and shall only be allowed if approved by the City Manager or designee. Stormwater facilities which require fencing due to steep side slopes which potentially endanger human life, must be designed with a six (6) foot high chain link fence or better (i.e., wall) around entire perimeter including maintenance berms and provide an access for maintenance vehicles.
5. One foot (1') minimum freeboard is required above design storm high water elevation.

## 5.5 Well Protection

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### 5.5.1 Purpose

The purpose of this section is to safeguard potable water supplies by regulating the storage, handling, use or production of hazardous substances around public potable water supply wells. It is also the intent and purpose of this section to control development in and adjacent to designated wellheads to protect water supplies from potential contamination by regulating or, where appropriate, prohibiting polluting uses. The availability of adequate and dependable supplies of quality potable water is of primary importance to the health, safety and welfare of the residents of the City of Crescent City. Thus, this section sets forth standards protecting both the quantity and quality of the groundwater supply from public wellheads as defined herein. Specific setback and protection requirements for individual and private water wells shall be in accordance with department of health or Florida Department of Environmental Protection (FDEP) regulations, as applicable.

### 5.5.2 Establishment of Well Field Protection Zone

A well field protection zone is hereby established, consisting of a five hundred (500) foot fixed radius around all wellheads of public water systems as defined by the Florida Department of Environmental Protection (FDEP), having one hundred and fifty (150) service connections or more within the City in order to protect such well heads from adverse effects of development.

For the purposes of this section, non-polluting land uses shall include recreational and conservation land uses and low-density residential land uses of no more than one (1) dwelling unit per five (5) acres. Non-polluting land uses shall be exempt from the development restrictions of well field protection zone. All other uses are presumed to be polluting land uses and therefore subject to development restrictions.

The City is hereby authorized to purchase property, through condemnation proceedings if necessary, within a well field protection zone and set it aside for such non-polluting land uses. Where possible, relocation of a polluting land use may occur through a transfer of density or a setback variance for a portion of the property outside of the well field protection zone.

### **5.5.3 Development Restrictions within the Well Field Protection Zone.**

- A. Wellfield protection zone (radius). All existing potable water wellfields which supply potable water for public consumption shall incorporate a minimum five-hundred (500) foot prohibited development zone around the perimeter of the well.
- B. Prohibited activities. The following activities shall be prohibited within this wellfield protection zone:
  - 1. Landfills.
  - 2. Facilities for the bulk storage, handling, or processing of materials on the Florida Substance List (Chapter 442, F.S.).
  - 3. Activities requiring the storage, use, handling, production, or transportation of restricted substances including agricultural chemicals, petroleum or industrial chemicals, hazardous/toxic or medical wastes.
  - 4. Feedlots or other concentrated animal facilities.
  - 5. Wastewater treatment plants, percolation ponds, and similar facilities.
  - 6. Mines; or
  - 7. Excavation of waterways or drainage facilities which intersect the water table.

Should a prohibited activity exist within the wellfield protection zone, such activity shall be considered a nonconforming use and the regulations governing nonconforming uses shall apply.

- C. New wells. All new wells which supply potable water for public consumption in Crescent City's service area will be required to establish a two hundred (200) foot zone of exclusion immediately surrounding the new wells overlaying the five hundred (500) foot wellfield protection zone. No development activities shall take place in the two hundred (200) foot zone of exclusion surrounding new wells.