## Sec. 26-202. Stormwater management and SWPPPs. (Ord. 006-10HR; 1-19-10)

- (a) *Applicability*. Unless otherwise provided in this chapter, the surface of land in the county shall not be disturbed or changed for any purpose, except in accordance with this section and other applicable sections of this chapter. (Ord. 006-10HR; 1-19-10)
- (b) *Guidelines.* For all sites subject to this section, an SWPPP shall be prepared based on the following guidelines (see Section 26-64 of this chapter for procedural requirements for review). Plans shall include appropriate measures and practices for erosion and sediment control, installed in a timely sequence during the development process, and maintained to ensure their proper function. (Ord. 006-10HR; 1-19-10)
  - (1) Land selection for development. Land should be selected where the drainage pattern, topography, and soils are favorable for the intended use. Tracts of land vary in suitability for different uses. Consideration shall be given to the major characteristics of the land area and the kinds of soil (identifying and evaluating potential erosion and sediment problems) and to the selection of appropriate control measures and practices.
  - (2) *Land exposure.* The erosion and sediment control plan shall expose the smallest practical area of land for the least possible time during development.
  - (3) *Retention of vegetation and topsoil.* When feasible, natural vegetation shall be retained and protected. Topsoil, where practical, shall be saved for replacing on graded areas.
  - (4) *Temporary measures.* Temporary plant cover, mulching and/or structures shall be utilized to protect areas subject to erosion during construction.
  - (5) *Provisions for increased runoff.* Provisions shall be made for the increased runoff caused by changed soil and surface conditions. Emphasis should be placed on conservation of existing on-site soil. Effective means include the use of diversion ditches, grassed or surfaced waterways and outlets, enlarged and protected drainage channels, grade control structures, and effective use of road gutters and storm sewers.
  - (6) *Silt traps.* Sediment basins or other forms of silt traps shall be used, where practical, to remove heavy sediment loads from runoff waters leaving the disturbed area.
  - (7) *Long-term measures.* Permanent vegetative cover and long-term erosion protection measures or structures shall be installed as soon as practical in the development process.

- (c) *Requirements and standards.* (Ord. 006-10HR; 1-19-10)
  - (1) *Methods of calculating stream flow and runoff.* SWPPPs shall be based on stream flow and runoff for the site to be developed. Formulas and values as prescribed in the county's "Stormwater Design Manual" shall be used for calculating all stream flow and runoff. Copies of the "Stormwater Design Manual" may be obtained through the county engineer's office. (Ord. 006-10HR; 1-19-10)
    - a. *Rainfall frequencies.* The following rainfall frequencies shall be used in the calculations for stormwater runoff and stormwater management facility design, depending upon the size of the watershed:

Size-Acres	Frequency-Years
300 +	50 year
40 – 299	25 year
0-39	10 year

The two (2) year, twenty-four (24) hour rainfall shall also be used as prescribed in the "Stormwater Design Manual".

- b. *Future development.* Calculations used in the design of proposed stormwater management facilities shall reflect the anticipated future development of the entire watershed.
- c. *Inlet and outlet control curves*. Appropriate inlet control and outlet control curves shall be used to determine headwater depths, where applicable.
- (2) *Primary drainage channel requirements.* (Ord. 006-10HR; 1-19-10)
  - a. *General.* All primary drainage channels located within or immediately adjacent to any improvement, development or subdivision shall be protected or improved by the applicant in accordance with the following requirements. The applicant shall be responsible for carrying out the proposed work in accordance with the approved SWPPP, and in compliance with the requirements of this section. The applicant shall plan and carry out his/her developments in a manner that will not interfere with or restrict the flow of water, nor increase the 100-year flood elevation by more than one (1) foot. The developer shall be responsible for any improvements to such channels, as needed to handle increased

runoff or other changes resulting from his/her development, in accordance with the provisions of this section.

- b. *Dedication of primary drainage channels.* All land adjacent to a primary drainage channel and not protected by levees, dikes, or fill shall be dedicated for the purpose of providing drainage right-of-way as follows:
  - 1. Commercial and/or residential subdivisions. In commercial and/or residential subdivisions, drainage easements of satisfactory width to provide working room for construction and maintenance equipment shall be deeded to the county for all drainage improvements, including stormwater management facilities, and shall be separate and apart from adjoining lots.
  - 2. Planned developments or town and country developments. In PDD Planned Development Districts or TC Town and Country Districts, the property owner(s) or HOA shall be responsible for maintenance of drainage channels and easements. The final plat approved for recordation shall indicate the available public easements for drainage channels. The county shall have the right to encroach onto these public easements or permit others to encroach for any purpose deemed appropriate by the county engineer. In no way does this right of encroachment lessen the obligation of the property owner(s) or the responsibility of the HOA for maintenance of the drainage channels and easements.
- c. *Existing channel modifications.* It is the intent of these regulations that existing drainage channels within buffer areas be maintained in their natural conditions whenever possible and whenever engineering is feasible. It is recognized that additional capacity may be required, and the ability to maintain such facilities must be provided, for which the following provisions shall be followed. The existing channel lying within or contiguous to a subdivision or parcel of land proposed for development or redevelopment may be:
  - 1. Cleaned to provide for free flow of water; and
  - 2. Straightened, widened, and improved to prevent overflow resulting from the 50-year frequency rainfall beyond the limits of the dedicated drainage easement provided for in subsection b. above; provided:

- [a] The SWPPP contains details of the proposed channel modifications and includes either:
  - [1] A mitigation plan for water quality impacts, including best management practices to be implemented as part of the channel modification and overall project; or
  - [2] An engineering analysis demonstrating no water quality impacts resulting from the proposed modifications.
- [b] The SWPPP must be approved in accordance with this section prior to commencing any channel modifications.

Whenever existing channel modifications are made, sodding, backsloping, cribbing, and other bank protection shall be designed and constructed to control erosion for the anticipated conditions and flow resulting from a 50-year rainfall.

- d. *Areas of special flood hazard.* In areas of special flood hazard, final grading of all lots and building sites for new construction or substantial improvement shall provide for elevation on fill, pilings, or earth filled curtain walls of the lowest habitable floor to at least two (2) feet above the 100-year flood elevation. Where fill is used to meet this requirement, the area two (2) feet above the 100-year flood elevation shall extend at least ten (10) feet from each side of the building pad. Certain types of non-residential structures are permitted within the floodplain if properly "flood-proofed" in compliance with Section 26-104(d) of this chapter and all applicable building code requirements.
- e. *Primary channels located within road easements*. Primary drainage channels located within road easements shall be placed in enclosed storm sewers, except under the following conditions:
  - 1. Where a paved road surface at least two (2) lanes wide is provided on both sides of an improved channel so as to provide access to abutting properties.
  - 2. For lots with a double-road frontage, an open drainage channel is permitted between the rear lot line and the paved road, provided that access from the road to the lot is prohibited both at the time of construction and in the future.

- 3. When a condition outlined in either 1. or 2. above is present, adequate width shall be dedicated as right-of-way to provide for the maintenance of an improved drainage channel and its bank.
- f. Levees protecting structures. All levees protecting residential structures or non-residential structures that are not flood-proofed shall be designed, constructed, and maintained to provide protection against the 500-year flood, plus three (3) feet of freeboard. Flood elevations shall be as shown on the latest Flood Insurance Rate Maps or as determined by appropriate hydrologic methods. Any levee constructed or improved under this subsection shall also comply with the other provisions of this article, including, but not limited to, subsection g. below.
- g. *Structures or obstructions in regulatory floodway.* Not withstanding any other provision of this chapter, no levees, dikes, fill materials, structures or obstructions that will impede the free flow of water during times of flood will be permitted in the regulatory floodway, unless:
  - 1. Such proposed impediment is a permitted use pursuant to Section 26-104(d)(2)i. of this chapter; or
  - 2. Such impediment was approved by the county engineer under this subsection g., or under any predecessor provision, before January 1, 2001;

PROVIDED, HOWEVER, that any specified activity permitted above must comply with all applicable federal, state, and local requirements, including, but not limited to, 44 C.F.R. 60.3(d)(3), as amended. Nothing in this subsection g. shall limit provisions in this chapter or elsewhere authorizing or requiring the maintenance and repair of levees, dikes, dams, and similar structures; provided, however, that this sentence shall not be construed as authorizing or requiring the repair or maintenance of any such structure to the extent that such repair or maintenance would result in a structure that would be higher or wider than it was before the need arose for such repair or maintenance.

h. *National Flood Insurance Program.* All applicable regulations of the National Flood Insurance Program are incorporated by reference herein.

- (3) Secondary drainage channel and surface requirements. (Ord. 006-10HR; 1-19-10)
  - a. *General.* All secondary drainage channels that are within or immediately adjacent to an improvement, development, or subdivision shall be protected and improved by the applicant in accordance with the following requirements.
  - b. *Drainage maintenance*. Drainage easements of satisfactory width to provide working room for construction and maintenance equipment shall be dedicated to the county for all drainage improvements in subdivision developments, including stormwater management facilities. Drainage improvement maintenance for planned developments, town and country developments, and commercial buildings shall be the responsibility of the property owner(s) or HOA.
  - c. *Improvements*.
    - Secondary drainage channels having a primary function of,
      1) collecting surface water from adjacent properties, or 2) intercepting and diverting side hill drainage, shall be improved open channels.
    - Secondary drainage channels having a primary function of,
      transporting surface water through a block or development; or 2) collecting surface water from cross channels, shall be improved as follows:
      - [a] Secondary drainage channels having drainage basins forty (40) acres or larger shall be improved with either a closed storm sewer or improved open channel designed to carry the runoff resulting from a 25-year frequency rainfall. A natural stream may be approved by the county engineer for environmental or aesthetic purposes, provided that it has the required carrying capacity and that flood protection requirements are met.
      - [b] Secondary drainage channels having less than forty (40) acres shall be improved with closed storm sewers designed to carry the runoff resulting from a 10-year frequency rainfall. Variation from this requirement may be approved by the county engineer for environmental or aesthetic purposes,

provided that it has the required carrying capacity and that flood protection requirements are met.

- 3. All improvements to drainage channels shall be carried out such that waters protected by the Federal Clean Water Act are not degraded.
- d. *Areas of special flood hazard.* In areas of special flood hazard, final grading of all lots and building sites for new construction, or substantial improvement of residential structures, shall provide for elevation on fill, pilings, or earth filled curtain walls of the lowest habitable floor to at least two (2) feet above the 100-year flood elevation. Where fill is added to meet this requirement, the area two (2) feet above the 100-year flood elevation shall extend at least ten (10) feet from each side of the building pad. Certain types of structures are permitted within the floodplain if properly "flood-proofed" in compliance with Section 26-104(d) of this chapter and all applicable building code requirements.
- e. Secondary drainage channels within road easements. Secondary drainage channels located within road easements shall be placed in enclosed storm sewers, except under the following conditions:
  - 1. Where a paved road surface at least two (2) lanes wide is provided on both sides of an improved channel so as to provide access to abutting properties.
  - 2. For lots with a double-road frontage, an open drainage channel is permitted between the rear lot line and the paved road, provided that access from the road to the lot is prohibited both at the time of construction and in the future.
  - 3. When a condition outlined in either 1. or 2. above is present, adequate width shall be dedicated as right-of-way to provide for the maintenance of an improved drainage channel and its bank.
- f. *Off-site discharges.* Off-site discharges from closed storm sewers or improved open channels will only be permitted at natural streams or man-made drainage channels acceptable to the county engineer, unless a drainage easement is obtained from the adjoining landowner. Adequate provisions shall be made to reduce discharge velocities such that the receiving channel is not degraded. When off-site drainage channels are not adequate to accept the additional runoff resulting from development, the developer shall install on-site facilities for controlled release of

stormwater runoff. These on-site drainage facilities shall be designed to limit the runoff rate to predevelopment levels during the design storm and the two-year storm.

- g. *Additional development requirements.* 
  - 1. Single-family residential, duplex or manufactured home development. Site grading for single-family, duplex, or manufactured home development shall be carried out in such a manner that surface water from each dwelling lot will flow directly to a storm sewer, improved channel, sodded swale, or paved road without running more than two hundred (200) feet. Rooftop runoff may be directed to pervious areas, infiltration practices, rainwater harvesting systems, or other stormwater treatment facilities on the dwelling lot. (Ord. 055-12HR; 10-16-12)
  - 2. Commercial, industrial, multi-family, and institutional development. For commercial, industrial, multi-family, and institutional development, roofs, paved areas, yards, courts, courtyards, and other impervious surfaces shall be drained into a stormwater management facility, with the exception that such drainage may flow directly into a road, curb and gutter system, or improved channel when of small area and approved by the county engineer. Construction of buildings over storm drainage improvements is not permitted.
- h. *Surface water on roads.* Surface water collected on roads shall be diverted to enclosed storm sewers or drainage channels at satisfactory intervals to prevent overflow of the road and its curbs and gutters, where provided, during a 10-year frequency rainfall.
- (4) *Minimum water quality requirements.* (Ord. 006-10HR; 1-19-10)
  - a. *Minimum water quality requirements.* Requirements from the current "Stormwater Design Manual" and "BMP Manual" shall be followed, and shall provide for minimum quality control requirements for development. Such requirements shall be adhered to unless waived by the county engineer after a determination that both of the following have occurred:
    - 1. It can be shown, by engineering calculations acceptable to the county engineer, that stormwater management facilities are not needed to control developed peak discharge rates and meet water quality requirements.

- 2. It can be shown that installing such facilities would not be in the best interest of local citizens or the county.
- b. Additional requirements. The county engineer may determine that additional stormwater management facilities, beyond those required under this section, are necessary for on-site stormwater management. Additional facilities may be needed to enhance or provide for the general health, safety, and welfare; to correct unacceptable or undesirable existing conditions; or to provide protection for future development in a more desirable fashion. If such a determination is made, the county engineer may do the following:
  - 1. Require that the owner/applicant grant any necessary easements to provide access to or drainage from the stormwater management facility.
  - 2. Develop an agreement with the owner/applicant for the over-design of the stormwater management facility to provide additional water quality benefits beyond that required by this section.
  - 3. Recommend financial participation by the county in construction of the stormwater management facility, to the extent that such facility exceeds the on-site stormwater management requirements, as determined by the county engineer. The county may pay the additional expenses incurred in providing the additional storage capacity or water quality benefits, including land costs and increased design and construction costs.
- (5) *Design criteria for improvements.* (Ord. 006-10HR; 1-19-10)
  - a. *Open channels*. Open channels shall be provided with an improved section that will carry runoff from the appropriate design storm and preclude the creation of backwater inundating any areas outside of dedicated drainage easements. The channel shall be designed to minimize negative water quality impacts and protect against erosion in accordance with standards adopted by the county engineer.
  - b. *Closed storm sewers and culverts.* Closed storm sewers and culverts shall be constructed of pre-cast or prefabricated pipe or box culvert or built in place, of closed box design, in conformity with county specifications. They shall be sized to carry the runoff from the appropriate design storm and to preclude the creation of

headwater inundating any areas outside of dedicated drainage easements.

- c. *Bridges.* Bridges shall be designed in accordance with standards adopted by the county engineer. Construction shall be in accordance with South Carolina Department of Transportation specifications.
- d. *Levees.* Levees shall be designed, constructed, and maintained as follows:
  - 1. USACE Manuals. Design and construction shall be in accordance with USACE's Manual EM 1110-2-1913 (31 March 1978) Design and Construction of Levees. The design and construction of drainage systems within levees shall be in accordance with the USACE's Manual EM 1110-2-1413 (15 Jan 1987) Hydrologic Analysis of Interior Areas. A South Carolina Registered Professional Engineer shall certify that he/she has been involved in the design, construction, and inspection phases and shall certify that the construction meets requirements of the corps of engineers.
  - 2. *Maintenance*. Owners of levees will perform the necessary and required maintenance and provide appropriate records to the county engineer. These records shall include all of the following:
    - [a] Signed agreements of perpetual operation and maintenance between the constructor and/or owner and the county.
    - [b] As-built construction plans sealed by a South Carolina Registered Professional Engineer.
    - [c] A levee maintenance program in accordance with the levee maintenance standards and procedures of the county.
    - [d] Periodic maintenance reports as required by the county engineer.
- e. Stormwater management facilities.
  - 1. *General.* Stormwater management facilities may include both structural and non-structural elements incorporating

quantity and/or quality control. A variety of different types of stormwater management facilities exist and can be used to satisfy the minimum quantity and/or quality control requirements. All proposed stormwater control measures shall be in accordance with the county's "Stormwater Design Manual". The county engineer may reject a SWPPP if it incorporates structures and facilities that do not meet the requirements of this section or if the plan utilizes numerous small structures where other alternatives are physically possible.

- 2. *Restriction of runoff rate.* Stormwater management facilities shall restrict the peak post-development runoff rate to the peak pre-development rate for the design storm. The design storm shall be ten (10), twenty-five (25), or fifty (50) years, depending on the size of the drainage basin. Overflow structures and emergency spillways shall be designed to accommodate the 100-year rainfall.
- 3. *Wet ponds.* Wet ponds (retention structures with a permanent pool) shall be utilized for drainage areas of twenty-five (25) acres or more, in accordance with the county's "Stormwater Design Manual". Wet ponds may be required for smaller drainage areas, as determined by the county engineer on a case-by-case basis. In all cases, wet ponds shall be located at least fifteen (15) feet from the property line of adjacent property.
- 4. Wet (retention) and dry (detention) facilities. Where wet (retention) and dry (detention) facilities are used, designs that consolidate them into a limited number of large structures are preferred over designs utilizing a large number of smaller structures. Additional state and/or federal permits may be required for larger stormwater management facilities impacting waters of the state protected by the Federal Clean Water Act.
- 5. Landscaping. Landscaping of stormwater management areas shall conform to all requirements of this chapter and to the design approved by the Public Works Department for any particular development. Retention/detention areas shall be landscaped with trees, shrubs, ground covers, and native perennials appropriate to the function as a wet or dry basin. If the landscaped area is also designed to meet on-site stormwater management requirements, one of the following must be met:

- [a] The area must be designed to provide an aesthetic focal point, such as a lake, creek or other water feature; to preserve a tree grouping; or to utilize the existing terrain and/or geological features of the site; or
- [b] The landscaping for the basin shall be integrated within the entire landscape plan.
- 6. Stormwater facilities records requirements. Drainage system and all stormwater management structures within the county (including public and private portions) shall be designed to the same engineering and technical criteria and standards. Owners of stormwater management facilities shall perform the required maintenance and provide appropriate records to the county engineer. These records shall include all of the following:
  - [a] As-built construction plans certified by a South Carolina Registered Civil Engineer, Registered Landscape Architect, or Tier B. Land Surveyor; and
  - [b] Periodic maintenance reports as required by the county engineer.
- (6) *Maintenance of stormwater management facilities.* (Ord. 006-10HR; 1-19-10)
  - a. *General maintenance requirements.* All stormwater management facilities shall be maintained by the owner(s) in such a manner as to maintain and enhance the general health, safety, and welfare; to reduce and minimize damage to public and private property; to reduce and minimize the impact of such facilities on land and stream channel erosion; to promote the attainment and maintenance of water quality standards; and to maintain, as nearly as possible, the pre-development runoff characteristics of the area. All maintenance of privately owned stormwater management facilities shall be at the sole cost and expense of the owner(s) of such facilities.
  - b. *Failure to maintain stormwater management facilities.* It shall be unlawful for the owner or occupant of any property upon which a stormwater management facility is located, to fail to maintain the facility in such a manner that the facility creates a danger to the general health, safety, and welfare. Should the owner fail to so maintain the stormwater management facility, this failure shall

constitute a violation of this chapter and shall be subject to the penalty provisions of Section 26-272.

- c. *County assistance in maintenance*. All stormwater management facilities shall be privately owned and/or maintained unless the county accepts the facility for county ownership and/or maintenance. The county may assist with maintenance only if the county has entered into a maintenance agreement and the owner provides an easement (and provided that the county has available resources to provide such assistance).
- (d) *Inspection of stormwater facilities.* (Ord. 006-10HR; 1-19-10)
  - (1) Inspection during construction. The county engineer shall periodically inspect the work completed under the approved SWPPP. Upon completion of such work, he/she shall make a final inspection, and if the work has been carried out in accordance with the plan, he/she shall issue a letter of satisfactory completion upon receipt of the as-built drawings. (Ord. 006-10HR; 1-19-10)
  - (2) *Right of entry*. (Ord. 006-10HR; 1-19-10)
    - a. General. The county engineer shall have a right-of-entry on or upon the property of any person subject to this section. The county engineer shall be provided ready access to all parts of the premises for the purposes of inspection, monitoring, sampling, inventory, examination and copying of records, and the performance of any other duties necessary to determine compliance with this section.
    - b. Security. Where a person has security measures in force requiring proper identification and clearance before entry onto the premises, the person shall make necessary arrangements with security guards so that, upon presentation of suitable identification, the county engineer will be permitted to enter without delay for the purposes of performing specific responsibilities.
    - c. Sampling. The county engineer shall have the right to set up on the person's property such devices as are necessary to conduct sampling and/or metering of the property as it relate to stormwater management
    - d. Obstruction to access. Any temporary or permanent obstruction to safe and easy access to the areas to be inspected and/or monitored shall be removed promptly by the person at the written or verbal request of the county engineer. The costs of clearing such access shall be borne by the person.

e. Imminent threat to health and/or safety. In cases where an imminent threat to the health or safety of the general public or the environment is suspected, the county engineer or the director of emergency services shall inspect existing stormwater management facilities to determine if immediate action is necessary. Such inspection shall be made with or without the consent of the owner, manager, or signatory official. If such consent is refused, the county engineer may seek issuance of an administrative search warrant.

## (e) *Levees.* (Ord. 006-10HR; 1-19-10)

- (1) *General.* Adequate levee maintenance is essential and cannot be overemphasized. Failure to properly maintain levees may render the levees inoperative during periods when their protection is needed. For safety in times of high water or floods, levee maintenance will be thorough and continuous. This requires a balanced maintenance program based on defined standards and procedures. (Ord. 006-10HR; 1-19-10)
- (2) *Maintenance standards and procedures.* Levees in Richland County will be maintained in accordance with the following standards to ensure serviceability against floods at all times. (Ord. 006-10HR; 1-19-10)
  - Sod growth. Maintenance of a sturdy sod growth on levee a. embankments is highly important, as sod is one of the most effective means of protecting the levee against erosion from rain, current, and wavewash. Periodic mowing with tractor-operated equipment is essential to maintaining a good sod growth, and shall be done at such intervals as necessary to keep down weeds and other noxious growth and to prevent the grass height from exceeding twelve (12) inches. The grass shall be mowed to a height of no less than two (2) inches but no greater than twelve (12) inches. The number of mowings required each season will depend on local conditions. The last mowing of the season shall be accomplished under conditions that allow the grass to obtain a height of approximately eight (8) inches to ten (10) inches entering the winter season. Mowing shall be performed to a distance of at least five (5) feet beyond the toe of the levee or berm. Burning grass and weeds is not permitted in the levee maintenance program, except during appropriate seasons when it is not detrimental to sod growth. During the growing season, spraying with herbicides on an as-needed basis is permissible and desirable for weed and brush control on levees and berms. Reseeding and fertilizing shall be completed frequently enough to sustain sod growth on levee embankments for erosion control.

- b. *Earth embankments.* Levee embankments shall be maintained to not less than the design grade and section by replacing any material lost from the crown or slopes. Ruts, washes, slides and subsidence shall be promptly repaired and the entire embankment maintained sufficiently smooth for power mowing. Levee crowns shall be graded as necessary to drain freely and prevent impoundment of rainwater. All brush, trees, and other undesirable growth shall be removed from the levee embankment.
- c. *Animal burrows.* Levees and adjacent landward areas shall be maintained free of all types of animal burrows. Animal burrows, when found, will be backfilled with compacted material and sodded. To prevent recurrence, efforts will be made to exterminate the burrowing animals.
- d. *Prevention of encroachment.* Care must be taken to assure that levees are not encroached upon. Buildings, structures, and storage of materials or equipment shall not be permitted on the levee. Refuse dumps are an item of frequent concern and will not be permitted. Following each high water, any debris deposited on the riverside slope of the levee shall be removed promptly.
- e. *Roads and ramps.* Access roads to and on the levees, including ramps, shall be bladed as necessary to keep the roadway shaped properly and free of ruts, pockets, and washes. Ramp embankments shall be maintained to their design section and design grade. Maintenance shall be performed as necessary to correct any encroachment into the levee crown where roads cross levees. Road surfacing material shall be replaced as necessary to maintain the road surface in good condition.
- f. *Miscellaneous levee facilities and appurtenances.* Levee facilities and appurtenances that are constructed on, over, or through the levee shall be maintained in a good state of repair and/or inspected at least annually. Facilities and appurtenances that operate only during high water must be checked carefully and repaired as necessary, immediately prior to high water season. Relief wells shall be checked during periods of high water. Wells that do not flow for an extended period of time may have to be tested by pumping to determine the extent of deterioration. Critically deteriorated wells shall be rehabilitated by cleaning, surging, and pumping. Check valves shall be inspected to ensure that they open freely and that the gaskets are in good condition. The most common of the facilities and appurtenances referred to herein are:
  - 1. Drainage structures through the levee.

- 2. Toe drainage systems.
- 3. Relief wells.
- 4. Levee slope protection and protection on dike ends.
- 5. Gates, cattle guards, and fences.
- 6. Siphons and pipe crossings.
- (3) *Inspection.* Frequent inspections are essential to a good levee maintenance program. In addition to the formal inspections required by the engineer, inspections shall be made prior to the beginning of the flood season, during and immediately following each high water period, and at such intermediate times as necessary to ensure satisfactory care of the levee. (Ord. 006-10HR; 1-19-10)
- (f) Supplemental regulations. All applicable provisions of the Standards for Stormwater Management and Sediment Reduction (Sections 72-301, 302, 305, 307, 308, 312, 313, 314, 315, 316) administered by the South Carolina Department of Health and Environmental Control pursuant to the South Carolina Stormwater Management and Sediment Reduction Act of 1991 are incorporated herein by reference. (Ord. 006-10HR; 1-19-10)