Chapter 13  STORMWATER MANAGEMENT AND EROSION CONTROL*

Cross references: Discharge of stormwater into sanitary sewers prohibited, § 15-130; approval of certain discharges into storm sewers, § 15-131.

Art. I. In General, §§ 13-1-13-20
Art. II. Stormwater Management Plan, §§ 13-21-13-60
Art. III. Grading Permits, Erosion Control, §§ 13-61-13-110
Art. IV. Stormwater Management Utility, §§ 13-111-13-123
ARTICLE I. IN GENERAL
Secs. 13-1--13-20. Reserved.
ARTICLE II. STORMWATER MANAGEMENT PLAN

This article shall be known and cited as "The Stormwater Management Ordinance" of the City of North Myrtle Beach.
(Ord. No. 05-40, 9-19-05)

(a) Unregulated land use changes may result in increased rates and volumes of stormwater runoff, creating local and area flooding harmful to human health, welfare, and safety, a risk to property, and unreasonably interfering with the enjoyment of life or property.
(b) Development requiring the alteration of natural topography and removal of vegetation may increase the rate and volume of stormwater runoff, thereby increasing soil erosion and sedimentation and degrading water quality.
(c) The impacts on a drainage facility resulting from increased erosion may significantly decrease the drainage facility's capacity to transport stormwater, thereby increasing the potential for more frequent or severe flooding.
(Ord. No. 05-40, 9-19-05)

Sec. 13-23. Jurisdiction.
This article shall apply to the development or redevelopment of any land in the incorporated areas of the City of North Myrtle Beach, and any land development outside the corporate limits for which a request for annexation has been submitted.
(Ord. No. 05-40, 9-19-05)

[The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:]

Applicant: The record owner, or his authorized representative, of a lot or tract of land that is the site of development or development activity within the scope of this article.

Clearing: The removal of trees and brush from the land, but shall not include the ordinary mowing of grass or gardening.

Culvert: Enclosed symmetrical channel of comparatively short length to convey water from one side of an embankment to the other.

Detention: The collection and storage of stormwater runoff in a surface or subsurface facility for subsequent controlled discharge to a watercourse or water body.

Developer: Any person who engages in development either as the owner or as the agent of an owner of property.

Development or development activity:
(1) The construction, installation, alteration, demolition or removal of a structure, impervious surface, or drainage facility; or
(2) The installation of infrastructure improvements such as drainage and utilities.
(3) Adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging or otherwise significantly disturbing the soil, mud, sand or rock of a site, but shall not include landscaping.

*Ditch:* A drainage channel in earth created by natural or artificial means to convey surface and/or subsurface water, flowing continuously or intermittently.

*Drainage facility:* Any component of the drainage system.

*Drainage system:* The surface and/or subsurface system, which collects and conveys stormwater and surface water, and includes all watercourses, water bodies and wetlands.

*Elevation:* Height in feet above a given known datum, such as mean sea level.

*Erosion:* The wearing or washing away of soil by the action of water or wind.

*Flood:* A temporary rise in the level of any water body, watercourse or wetland, which results in, the inundation of areas not ordinarily covered by water.

*Grading:* Any displacement of soil by stripping, excavating, stockpiling, or any combination thereof, but does not include landscaping.

*Impervious surface:* A surface, which has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. This term includes, but is not limited to, most conventionally surfaced streets, roofs, sidewalks, driveways, and parking lots.

*Owner:* The person in who is vested the fee ownership, dominion, or title of property. This term may also include a tenant, if chargeable under his lease for the maintenance of the property, and any agent of the owner or tenant including a developer.

*Person:* Any and all persons, natural or artificial and includes any individual, firm, corporation, government agency, business trust, estate, trust, partnership, association, two (2) or more persons having a joint or common interest, or any other legal entity.

*Post-development conditions:* Those conditions which are expected to exist, or do exist, after alteration, resulting from human activity, of the natural topography, vegetation, and rate, volume or direction of stormwater runoff.

*Predevelopment conditions:* Those conditions which existed prior to any development activity on the site in terms of the natural topography, vegetation, and rate, volume or direction of stormwater runoff.

*Primary drainage system:* System that includes the major drainage facilities and appurtenances for conveying stormwater and surface water from watershed.

*Rate:* Volume of water passing a point per unit of time, generally expressed in cubic feet per second (cfs).

*Receiving bodies of water:* Any water bodies, watercourses or wetlands into which surface waters flow either naturally, in manmade ditches, or in a closed conduit system.

*Retention:* The collection and storage of stormwater runoff without subsequent discharge to surface waters.

*Return period:* The average length of time between rainfall events having the same amount of precipitation and length of time over which the precipitation occurs.

*Runoff:* That part of rainfall that is not absorbed into the ground, but as surface water, flows from or over the land.

*Secondary drainage system:* System that includes minor storm sewer systems, ditches, swales, and appurtenant structures and systems for conveying stormwater and surface water.
Sedimentation facility: Any structure or area, which is designed to retain suspended sediments from collected stormwater runoff.

Site: Any tract, lot or parcel of land or combination of tracts, lots or parcels of land which are in one (1) ownership, or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision, or project.

Storm sewer: Artificial drainage facility or system designed to collect and transport stormwater runoff from storms of frequent occurrence, such as two-, five-, ten- and twenty-five year event.

Stormwater management facility: Drainage facility whose function is to mitigate the detrimental effects of stormwater runoff generated by development activity by encouraging infiltration and percolation, attenuating peak discharge rates and volumes, reducing and controlling erosion and sediment transport, or otherwise simulates the predevelopment hydrologic conditions of a site.

Stormwater management plan: Drawings, maps, calculations and technical specifications prepared in accordance with the provisions of this article, with the purpose of mitigating the detrimental effects of stormwater runoff generated by development activity.

Subdivide: To divide the ownership of a parcel of land, whether improved or unimproved, into two (2) or more contiguous lots or parcels of land, whether by reference to a plat, by metes and bounds or otherwise, or, if the establishment of a new street is involved, any division of a parcel of land. Subdivision includes a re-subdivision and, when appropriate to the context, relates to the process of subdividing or to the land subdivided.

Tailwater: The depth of ponding of water at the outlet of a culvert as measured from the culvert invert to the water surface in the outlet channel.

Vegetation: All plant growth, especially trees, shrubs, vines, ferns, mosses and grasses.

Volume of rainfall: The amount of precipitation occurring over the duration of a storm event, generally expressed in inches.

Volume of runoff: The quantity of stormwater runoff generated upstream of a particular point, or stored in a stormwater management facility, generally expressed in cubic feet (c.f.) or acre-feet (acre-ft.).

Watercourse: Any natural or artificial stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, street, roadway, swale or wash in which water flows in a definite direction, either continuously or intermittently, and which has a definite channel, bed, or banks.

Water body: Any natural or artificial pond, lake, reservoir or other area which ordinarily or intermittently contains water and which has a discernible shoreline.

Watershed: A drainage area or drainage basin contributing to the flow of stormwater into a receiving watercourse or water body.

Wetlands: Low-lying areas that typically exhibits standing water where the US Army Corps of Engineers and or SCDHEC/OCRM have approved delineation.

(Ord. No. 05-40, 9-19-05)

Sec. 13-25. Applicability exemptions, modifications, and appeals.

(a) Applicability. A stormwater management plan prepared in accordance with this article must be approved by the city engineer when:
(1) Recording a subdivision plat, subdividing land, or commencing development for subdivision; or
(2) Commencing development for multifamily residential, single family residential, institutional, commercial, industrial or other land development projects; or
(3) Construction of a new roadway; or
(4) Altering, rerouting, deepening, widening, obstructing or changing the characteristics of an existing drainage; or
(5) Commencing any other development activity, which may have adverse impacts on any wetland, watercourse, or water body.
(b) Exemptions. The following activities are exempt from the requirements of this article:
(1) Construction of a single-family home shall not require approval of a stormwater management plan if any of the following conditions are met:
  a. Drainage provisions for the subdivision were previously approved and remain valid as part of a final plat; and the development is constructed in substantial accordance with the stormwater management provisions contained in the development plan; or
  b. The lot does not require substantial removal or placement of soil, defined as more than eight (8) inches, as measured at the building setback line.
(2) Maintenance work performed on existing stormwater detention/retention structures and drainage ditches, provided such work does not alter the function, capacity, or integrity of such facilities.
(3) Landscape improvements installed on private property.
(c) Appeals. Determinations made by the city engineer regarding the enforcement of provisions of this article may be appealed, in writing, to the city manager within ten (10) days of receipt of notification of action by the city.
(Ord. No. 05-40, 9-19-05)

Sec. 13-26. Application procedures, required submittals, and fees.
(a) Stormwater management plan permit application.
(1) Purpose. The purpose of the stormwater management plan review process is to provide an organized framework for evaluating and acting upon proposals for development as they relate to stormwater management issues.
(2) Required information. The applicant shall furnish the city engineer with three (3) copies of the stormwater management plan, sealed by a professional engineer registered in the State of South Carolina or, where permitted by state law, a Tier B land surveyor registered in the State of South Carolina.
(3) Review process. Within thirty (30) calendar days after submission of the completed stormwater management plan by the applicant, the city engineer shall approve, or recommend that specified conditions conforming to the requirements of this article be met prior to approval, and shall notify the applicant accordingly.
(4) Review criteria. The city engineer, in recommending approval, or conditions required before approval may be granted for a stormwater management plan permit application, shall consider the requirements of this article. As a minimum, they shall consider the following:
  a. The characteristics and limitations of the soil at the proposed site, specifically with respect to percolation, infiltration, and water table depth.
b. The existing topography of the proposed site and the extent of proposed topographical changes after development.
c. The existing vegetation on the site and the extent of vegetation changes after development.
d. The impact of the proposed project on upstream and downstream water quantity and quality, and specifically the potential for flooding conditions of adjacent or affected properties.
e. The plans and specifications of structures or devices to be employed for detention, retention, erosion control, and flow attenuation.
f. The continuity of phased projects (projects to be developed in phases will require the submission of a comprehensive drainage plan for the project’s total boundary).

(5) Fees. Permit fees shall be in accordance with the building permit fee schedule section 6-3(b). Plan review fees shall be in accordance with section 6-3(d)(1).

(Ord. No. 05-40, 9-19-05)

It is the responsibility of an applicant to include sufficient information in the stormwater management plan to enable evaluation of the potential and predicted impacts of the proposed activity on all affected lands and water, both on-and off-site, and the effectiveness and acceptability of the measures proposed by the applicant for preventing or reducing adverse impacts.

(Ord. No. 05-40, 9-19-05)

(a) Purpose. The purpose of this section is to establish engineering standards for the design, construction, and maintenance activities of stormwater management plans. It is the intent of the article that the performance standards be satisfied by all development proposals, while the design the city engineer may modify requirements and maintenance responsibilities.
(b) [Approval of stormwater management plans.] Stormwater management plans will be approved, consistent with procedures in this article, when the applicant has demonstrated that the proposed development activity is designed to meet each of the following performance standards:
(1) To encourage the use of "best management practices," i.e., maximum use of on-site storage facilities to reduce runoff rates and volumes, and minimize erosion and sedimentation.
(2) To design, construct, and maintain stormwater management facilities in a manner, which controls post-development runoff so as to simulate the time-discharge function for predevelopment runoff, based on the twenty-five-year, twenty-four-hour design storm.
(3) To design, construct, and maintain stormwater management facilities in such a manner that erosion or sedimentation does not exceed natural or predevelopment conditions.
(4) To ensure that downstream drainage systems are adequate to handle any increased flows and to provide off-site improvements where necessary to comply with the City of North Myrtle Beach Storm Water Master Plan.
(5) To design, construct and maintain stormwater management facilities consistent with mosquito control objectives and programs when not in conflict with this article.
(6) To protect the water quality of the surf and the physical characteristics of the beach area by minimizing the rates, volumes, and velocities of stormwater entering drainage systems discharging onto the beach.

(Ord. No. 05-40, 9-19-05)

Sec. 13-29. Maintenance responsibilities for stormwater management facilities.
(a) General. The installed on-site stormwater management facilities required by this article shall be maintained by the owner. Adequate ingress and egress shall be provided by the owner for the city to inspect the premises at reasonable times.
(b) Failure to maintain. Should the owner fail to properly maintain the system as required by this article, the city engineer shall give written notice to the owner of record as appears on the latest property tax rolls by certified mail of the nature of the violation and order the corrective action necessary. Should the owner fail, within thirty (30) days from the date of the notice, to take corrective action to the satisfaction of the city engineer or appeal the notice and order, the city may enter upon the lands, take corrective action as the city engineer may deem necessary, and place a lien on the property of the owner for the costs thereof.
(c) City maintenance. Certain off-site systems as may be identified by the city engineer, which are to provide general public benefits, may be accepted by the city for maintenance. All areas and/or structures to be maintained by the city must be dedicated to the city by plat or separate instrument.

(Ord. No. 05-40, 9-19-05)

Sec. 13-30. Plan adherence.
The applicant shall be required to strictly adhere to the stormwater management plan approved by the city engineer. Any changes or amendments to the plan must be approved by the city engineer in accordance with the procedures set forth in this article of obtaining stormwater management plan approval. Enforcement officials shall, and are herein granted, inspection rights and right-of-entry privileges in order to ensure compliance with the requirements of this article.
After completion of the project and prior to issuance of a certificate of occupancy, the city engineer shall require from the applicant that the professional engineer in charge certify compliance with terms of the approved stormwater management plan and permit.

(Ord. No. 05-40, 9-19-05)

Sec. 13-31. Enforcement.
If the city engineer determines that the project is not being carried out in accordance with the approved plan, or that any project subject to the article is being carried out without approval, the city engineer is authorized to take the appropriate enforcement action.

(Ord. No. 05-40, 9-19-05)

Sec. 13-32. Penalties.
Any person who violates or causes to be violated any provision of this article or permits any such violation or falls to comply with any of the requirements herein shall be guilty
of a misdemeanor. Each day upon which such violation occurs shall constitute a separate offense. In addition to any other remedies, whether civil or criminal, the violation of this article may be restrained by injunction, including mandatory injunction, and otherwise abated in any manner provided by law.
(Ord. No. 05-40, 9-19-05)

Sec. 13-33. Emergency exemptions.
This article shall not be construed to prevent the performance of any act necessary to prevent material harm to or destruction of real or personal property as a result of a present emergency, including but not limited to fire, hazards resulting from violent storms or hurricanes, or when obtaining a permit is impractical and would cause undue hardship in the protection of the property.
A report of any such emergency action shall be made to the building department by the owner or person in control of the property upon which emergency action was taken as soon as practical, but not more than ten (10) days following such action. Further, the property on which the emergency action is taken shall be brought back to acceptable standards as determined by the city engineer within thirty (30) calendar days after initiation of such action.
(Ord. No. 05-40, 9-19-05)

Sec. 13-34. Separability provision.
If any part of this article is held to be unconstitutional, it shall be construed to have been the legislative intent to pass this article without such unconstitutional part, and the remainder of this article, as to the exclusion of such part, shall be deemed and held to be valid as if such part had not been included herein. If this article or any provision hereof is held to be inapplicable to any persons, group of persons, property, kinds of property, circumstances or set of circumstances, such holding shall not affect the applicability hereof to any other person, property or circumstances.
(Ord. No. 05-40, 9-19-05)

Sec. 13-35. Conflict with other ordinances and codes.
In case of conflict between this article or any part thereof, and the whole or part of any other existing or future ordinance or code, the most restrictive in each case shall apply.
(Ord. No. 05-40, 9-19-05)

Sec. 13-36. Vested rights.
This article shall not in any way limit or modify the vested rights of any person to complete any development of [or] improvements to lands based upon prior law, where previous permits or authorization have been granted in effect, or where application for such permits or authorization has been made.
(Ord. No. 05-40, 9-19-05)

Secs. 13-37--13-60. Reserved.
ARTICLE III. GRADING PERMITS, EROSION CONTROL

Sec. 13-61. Definitions.
As used in this article, the following terms shall have the respective meanings ascribed to them:

*As built plans:* Plans, which are drawn to the same scale as the approved plan, and which:
1. Show that the location, dimensions, elevations, and status of the resulting grading, drainage structures, and/or drainage systems and erosion and sediment control practices (including vegetative measures) are in substantial conformance with the previously approved detailed development plans and specifications.
2. Note all deviations from the approved plans on the "as built" plan. (Data required to show such deviations and to support certifications such as measurements, rod readings, elevations, computations, and notes on field observations may be recorded ("red lined") directly on the approved plan.)

*Certification:* A signed, written statement that specific construction, inspections or tests (where required) have been performed, and that they comply with the applicable requirements of this article.

*Compaction:* Densification of a soil or rock fill by mechanical or other acceptable procedures.

*Cut:* See *Excavation*.

*Development or development activity:* (1) The construction, installation, alteration, demolition or removal of a structure, impervious surface, or drainage facility; or
2. The installation of infrastructure improvements such as drainage and utilities.
3. Adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging or otherwise significantly disturbing the soil, mud, sand or rock of a site, but shall not include landscaping.

*Diversion:* A channel, ditch or ridge constructed across a slope, which intercepts and diverts surface runoff.

*Drainage way:* See *Watercourse*.

*Embarkment or fill:* A deposit of soil, rock or other materials placed by man.

*Engineer:* See *Professional engineer*.

*Erosion:* The process by which the ground surface is worn away by the action of wind or water.

*Excavation or cut:* Any act (or the conditions resulting therefore) by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced or relocated.

*Existing grade:* The vertical location of the existing ground surface prior to excavating or filling.

*Finished grade:* The final grade or elevation of the ground surface conforming to the proposed design.

*Flood plain:* That area, which would be inundated by stormwater runoff equivalent to that which would occur from a rainfall of one hundred-year frequency after total development of the watershed, said area defined by an elevation below which only controlled development may take place.
Grading: The clearing of land and movement of soil that accompanies the development of properties. The installation of infrastructure improvements, such as utilities, roads, drainage, etc.

Grading permit: A permit issued to authorize work to be performed under this article.

Load bearing fill: Any facility, earthwork or fill placed in a controlled manner to support structural foundations or vehicular traffic, the instability of which would constitute a public hazard or nuisance.

Natural ground surface: The ground surface in its original state before grading, stripping, excavation or filling.

Permittee: Any person to whom a permit is issued pursuant to this article.

Professional engineer: An engineer duly registered by the state to practice professional engineering.

Professional land surveyor: A person who has been duly registered and licensed by the state to practice land surveying.

Regulated grading: Any grading performed in accordance with the provisions of this article.

Sediment: Soils or other surficial materials transported by wind or surface water as a product of erosion.

Site: That portion of any parcel of land, upon which grading is performed or permitted.

Slope: The inclined exposed surface of a fill, excavation or natural terrain.

Soil: All earth material of whatever origin that overlies bedrock (including, but not limited to, the decomposed zone of bedrock which can be readily excavated by mechanical equipment).

Steep slope: A slope greater than fifteen (15) percent grade, which is characterized by increased runoff, erosion and sediment hazards.

Stripping: Any activity, which removes the vegetative surface cover (including tree removal, clearing, grubbing, and removal of top soil).

Structural rock fills: Fills constructed predominantly of rock materials for the purpose of supporting structures.

Watercourse and/or drainage way: Any natural or artificial watercourse (including, but not limited to, streams, rivers, creeks, ditches, channels, canals, conduits, culverts, drains, waterways, gullies, ravines or washes) in which surface waters, flood waters and/or run-off waters flow in a definite course, either continuously or intermittently; and includes any area adjacent thereto which is subject to inundation by reason of overflow or flood water.

(Ord. No. 05-40, 9-19-05)


(a) The purpose of this article is to safeguard life, limb, property and public welfare by establishing minimum requirements for land development activities, grading of land and for control of soil erosion, sediment and drainage.

(b) The provisions of this article are minimum requirements, shall be in addition to any other legal requirements, and shall be liberally construed to accomplish the purposes hereinafore set forth.

(Ord. No. 05-40, 9-19-05)
Sec. 13-63. Scope of grading permit required.  
Except as set forth in section 13-64, no person shall conduct land development activities, create borrow pits or spoil areas, or install retaining walls greater than thirty (30) inches in height without first obtaining approval for a grading permit from the city engineer.  
(1) Grading and drainage plans shall be approved by the city engineer and the approved work shall be authorized by permit as follows:  
a. Under the building permit issued for construction of the principle structure on the site.  
b. Under a separate grading permit issued for development activities not associated with the building of a structure.  
(Ord. No. 05-40, 9-19-05)

Sec. 13-64. Exemptions.  
A grading permit shall not be required for the following activities, provided that all state and federal laws are satisfied:  
(1) Accepted agricultural pursuits and land management practices.  
(2) Grading and related earthwork incidental to individual water wells and sewage disposal (septic) systems installed pursuant to a valid permit from Horry County and South Carolina Department of Health and Environmental Control.  
(3) Grading on existing developed lots or parcels for the purpose of landscaping.  
(4) Construction of a single-family home shall not require a grading permit if any of the following conditions are met:  
a. Erosion control provisions for the subdivision were previously approved and remain valid as part of a final plat; and the development is constructed in substantial accordance with the erosion control provisions contained in the development plan.  
b. The lot does not require substantial removal or placement of soil, defined as more than eight (8) inches, as measured at the building setback line.  
(Ord. No. 05-40, 9-19-05)

Sec. 13-65. Application for permit.  
Permit applications shall include the following:  
(a) Information statement.  
(1) The proposed area of development,  
(2) The proposed site development or grading work to be accomplished, and  
(3) The necessary provision for storm drainage, erosion and sediment control, and landscape establishment.  
(b) Plans and specifications requirements.  
(1) A vicinity sketch in such detail to easily locate the property, indicating north arrow and scale.  
(2) A boundary line survey of any site for which a permit is sought; on approved and recorded subdivision lots, a copy of the officially recorded plat shall be submitted.  
(3) A plan of the site, showing:  
a. Name, address and telephone number of the owner, developer and applicant.  
b. A time schedule indicating the anticipated starting and completion dates of the development sequence in accordance with the provisions of subsection (b)(3) l. of this
section, and the time exposure of each area prior to the completion of effective erosion and sediment control measures.

c. The estimated total cost.
d. Location of any existing buildings or structures, utilities, sewers, water and storm drains on the site where the work is to be performed.
e. Location of any building or structure within one hundred (100) feet of the site.
f. Elevations, dimensions, location, extent and the slope of all proposed grading (including, but not limited to, building and driveway grades, utilities, sewer, water and storm drains), all clearly indicated with finished contours at the same interval as required or used for existing topography.
g. Adequate plans of:
   1. All drainage provisions, retaining walls, cribbing, vegetative practices, erosion and sediment control measures or other protective devices to be constructed in connection with, or as part of, the proposed work;
   2. A map showing the drainage area of land tributary to the site; and
   3. Estimated runoff of the area served by any drains. Complete storm drainage studies shall be submitted for the site, if not previously submitted.
h. A grading plan based on the findings and evaluations of the soil investigation report.
i. An appropriate legend.
j. The plan of the site including a one hundred-foot adjacent peripheral strip and showing existing topography of the contour.
k. Such supplemental reports, data and/or additional information as the city may require to insure the adequacy of the proposed plan. Such reports, data and/or additional information may require that the following be prepared by a registered professional engineer employed by or under contract with the applicant.
l. The plan shall provide for erosion and sediment control measures throughout all phases of development:
   1. Phase I: Stripping and/or clearing;
   2. Phase II: Rough grading and construction;
   3. Phase III: Final grading and vegetative establishment;
   4. Phase IV: Maintenance; and
   5. A proposed time schedule for each of said phases.
(4) The professional engineer's recommendations to guide the design, construction and inspection of the proposed site. Said recommendations shall take into consideration the following:
   a. Clearing, grubbing, stripping, keying and undercutting for the acceptance of fill.
   b. Compaction requirement for all classes of fill.
   c. Allowable slope angle and bench requirements for cut and fill slopes.
   d. Erosion control during both the construction and the life of the facility.
   e. Ground water control during both the construction and the life of the facility.
   f. Testing and inspection requirements of this article.
   g. Location, utilization and restoration of borrow and/or spoil areas.
(5) A record of field observations, field test data (such as behavior of adjacent or nearby structures; geologic history and origin of soil; field test boring log giving classification, standard penetration data and water level observations; field test results for pile load test, plate load test and others as necessary), laboratory test data (such as moisture density
curves, grain size curves, shear strength tests, moisture content, and consolidation test results), and project characteristics (such as those affecting soil and foundation design; sensitivity to settlement and design loads; factor of safety against failure; consequences of failure and merits of programmed maintenance; location of borrow pits on site or location where suitable fill will be obtained) upon which the professional engineer's recommendations were based.
(Ord. No. 05-40, 9-19-05)

Sec. 13-66. Permit approval.
No permit shall be issued unless:
(1) The proposed erosion and sediment control measures have been approved by the city engineer.
(2) All plans have been approved and permits issued by the proper state and federal agencies (where applicable).
(3) Plans have been approved by all applicable city departments.
(Ord. No. 05-40, 9-19-05)

Sec. 13-67. Permit; modification.
Major modifications of the approved grading plans shall be submitted to the city engineer and reprocessed as the application. The city engineer may authorize field modifications of a minor nature.
(Ord. No. 05-40, 9-19-05)

Sec. 13-68. Permit fees.
Permit fees shall be according to the building permit fee schedule, section 6-3(b). Plan review fees shall be in accordance with section 6-3(d).
(Ord. No. 05-40, 9-19-05)

Sec. 13-69. Time limitations generally.
(a) If the applicant is unable to complete the work within the time specified in the approved application, within thirty (30) days of the expiration of the permit, applicant shall present a written request for extension to the city engineer, setting forth the reasons therefore. Where, in the sole discretion of the department, such an extension is warrant, it may grant such additional time as may be necessary.
(b) If operations cease for a period of ninety (90) consecutive days, permanent erosion and sediment control measures shall be employed.
(Ord. No. 05-40, 9-19-05)

Sec. 13-70. Responsibility for damages.
Neither the issuance of a permit under the provisions of this article nor the compliance with the provisions of this article shall relieve any person from any responsibility for damage to persons or property otherwise imposed by law, nor impose any liability upon the city for any such damages.
(Ord. No. 05-40, 9-19-05)

Sec. 13-71. Materials.
Only materials which meet generally accepted engineering standards shall be used for fill.
(Ord. No. 05-40, 9-19-05)

**Cross references:** Littering, etc., generally, § 12-22 et seq.

Sec. 13-72. Maintenance of protective measures.
All graded surfaces, erosion control measures, vegetative covers and other protective measures disturbed or destroyed during the course of operations shall be promptly repaired, restored and maintained in accordance with the approved plans and specifications until permanent measures are accepted by the city engineer.
(Ord. No. 05-40, 9-19-05)

Sec. 13-73. Grading plans and specifications provisions.
All grading plans and specifications shall provide for the following: in accordance with the current construction standards and details in use by the city.
(1) Development shall be fitted to the topography and soils as to create the least erosion potential.
(2) Natural vegetation shall be retained and protected wherever possible.
(3) Only the smallest practical area shall be exposed, and only for the shortest practical period of time.
(4) Erosion control practices (such as interceptor ditches, berms, terraces, contour ripping, soil erosion checks and sediment basins) shall be installed to minimize soil and water losses.
(5) Temporary vegetation or mulching shall be used to protect critical areas exposed during the time of development.
(6) During and after development, stormwater management provisions shall be utilized to effectively accommodate increased runoff caused by changes in soil and surface conditions, and to avoid siltation of receiving streams.
(7) Permanent vegetation and structures shall be installed in the development as soon as the weather permits.
(Ord. No. 05-40, 9-19-05)

Sec. 13-74. Drainage.
Surface water runoff may be disposed of or conveyed in accordance with the following provisions:
(1) Drainage facilities shall be designed to prevent erosion, or uncontrolled overflow or ponding when ponding is not an integral part of the design and function of the drainage facility. Said water shall be conveyed to an acceptable outlet in accordance with the design criteria, standards and procedures required by the city engineer. The ponding of water shall not be permitted above cut or fill slopes or on drainage terraces; adequate drainage facilities shall be provided to prevent such ponding.
(2) Surface and/or ground waters shall not damage the face of any cut or fill; slopes shall be protected from surface water runoff by berms, swales, or brow ditches. Suitable underdrains shall be installed to intercept and carry ground water seepage to an acceptable outlet.
(3) All areas shall be graded to provide for positive drainage away from the building toward the approved disposal area.
(4) Stormwater management subject to the requirements and recommendation of the city engineer. Measures such as infiltration beds, dry wells and retention ponds may be used to allow stormwater runoff to percolate into the soil.
(Ord. No. 05-40, 9-19-05)

Sec. 13-75. Fees for installation of drainage tile.
(a) Installation of drainage pipe by the city for disposal of surface water runoff shall be limited to public rights-of-way or dedicated public drainage ways within residential property developments and such installation shall be in accordance with the current material cost for the installation to be paid by the applicant prior to the commencement of work. The material cost shall be as established periodically by the city engineer.
(b) Whenever the city is unable to install drainage tile due to time, work schedules or unavailability of the required tile size or linear footage, the purchase and installation of such tile may be accomplished by the applicant; provided however, that the requirements of all other applicable provisions of the Code of Ordinances are met.
(Ord. No. 05-40, 9-19-05)

Sec. 13-76. Submitting inspection and construction control program.
Prior to initiating any operations subject to this article, the permittee shall submit to the city engineer for its approval, a proposed inspection and construction control program.
(Ord. No. 05-40, 9-19-05)

Sec. 13-77. Tests; inspection; certification of reports.
(a) When required by the city engineer, inspections and testing shall be performed under the direction of a professional engineer who shall certify all inspection reports and test results. Such reports shall include certification by an engineer of the adequacy of:
(1) Cleared areas and benched or keyed surfaces prepared to receive fills; and
(2) Removal of unsuitable materials; and
(3) Construction of erosion control or drainage devices; buttress fills, underdrains, retaining walls, and other grading appurtenances; and
(4) The degree of compaction where tests are performed.
(b) All certified inspection reports and certified test results shall be periodically submitted to the city engineer during the performance of the work.
(Ord. No. 05-40, 9-19-05)

Sec. 13-78. Final report.
Upon completion of permitted work the following shall be submitted to the city engineer:
(1) An "as built" plan.
(2) Certification by the owner and/or permittee on the "as built" plan that all grading, drainage, structures and/or systems, erosion and sediment control practices including facilities and vegetative measures have been completed in conformance with the approved plans and specifications.
(3) A report summarizing the inspection reports, field and laboratory tests and, locations of tests and field observations.
(Ord. No. 05-40, 9-19-05)

Sec. 13-79. Notification of completion.
The permittee or permittee's agent shall notify the city engineer when the grading
operation is ready for final inspection. Final approval shall be given in a timely manner
only after all work and required vegetative stabilization (including installation of all
drainage structures and erosion protective devices) has been completed, and the required
reports have been submitted.
(Ord. No. 05-40, 9-19-05)

Sec. 13-80. Notification of noncompliance.
If at any stage the work does not comply or conform to a permit or plans and
specifications (or any approved modification thereof), a written notice of noncompliance
shall be sent by registered mail to the permittee and to the surety (in the event a bond
secures the work). Such notice shall set forth the nature of the corrections required and
the time within such corrections shall be made. If the corrections are not commenced and
diligently pursued with ten (10) days of delivery of said notice, the permittee shall be
considered in default of such permittee's obligations under this article, and the city
engineer shall immediately notify the permittee and the surety by registered mail that a
default has occurred.
(Ord. No. 05-40, 9-19-05)

Sec. 13-81. Punishment for violations.
(a) In addition to any civil remedies, at law or in equity (including ex parte injunction
relief), any violation of this article shall be a misdemeanor, punishable as provided in
section 1-6 for each violation. Every day that said violation continues shall be a separate
offense.
(b) No such violation shall be prosecuted until after issuance of the notice required by
the provisions of section 13-88.
(Ord. No. 05-40, 9-19-05)
Secs. 13-82--13-110. Reserved.
ARTICLE IV. STORMWATER MANAGEMENT UTILITY*

*Cross references: Municipal utilities, Ch. 15.

Sec. 13-111. Article designation and authority.
This article may be cited as the "Stormwater Management Utility Ordinance" and is adopted pursuant to S.C. Code § 48-14-10, S.C. Code § 5-7-30 and S.C. Land Resources Conservation Commission Regulations 72-300 to 72-316.
(Ord. No. 05-40, 9-19-05)

Sec. 13-112. Definitions.
Unless the context specifically indicates otherwise, the meanings of words and terms used in this article shall be as set forth in S.C. Land Resources Conservation Commission, Regulations, 72-301 (Supp. 1992).
(Ord. No. 05-40, 9-19-05)

Sec. 13-113. Establishment of stormwater management utility; administration; duties and powers.
The city council hereby establishes a stormwater management utility (utility) to carry out the purposes, functions and responsibilities herein set forth. The city manager or his designee shall administer the utility, which shall have the powers, and duties hereinafter set out, which powers and duties are not necessarily exclusive to the utility:
(1) Stormwater management planning and preparation of comprehensive watershed master plans for stormwater management;
(2) Regular inspections of public and private stormwater management facilities and measures and the construction thereof;
(3) Maintenance and improvement of stormwater management facilities that have been accepted by the city for that purpose;
(4) Plan review and inspection of stormwater management plans, measures and practices
(5) Retrofitting designed watersheds to reduce existing flooding problems or to improve water quality;
(6) Acquisition of interests in land, including easements;
(7) Design and construction of stormwater management facilities and acquisition of equipment;
(8) Water quantity and water quality management, including monitoring surveillance; and
(9) Any and all powers and duties delegated or granted to it as a local government implementing agency under the laws and regulations of the State of South Carolina and the ordinances of this city.
(Ord. No. 05-40, 9-19-05)

Sec. 13-114. Boundaries and jurisdiction.
The municipal limits and jurisdiction of the utility shall extend to the limits of the city, as they may exist from time to time.

(Ord. No. 05-40, 9-19-05)

Sec. 13-115. Regulation of land-disturbing activity.
The city council shall establish by ordinance a system regulating land disturbing activities, including, but not limited to provisions for reviewing and approving stormwater management plans; creating design requirements for such plans and land disturbing activities; and providing operational and maintenance requirements for stormwater management facilities and measures.

(Ord. No. 05-40, 9-19-05)

Sec. 13-116. Stormwater utility fees.
(a) The fee system shall be reasonable and equitable so that users pay to the extent they contribute to the need for the utility, and the fees shall be apportioned with approximate equality and upon a reasonable basis with due regard for the benefits conferred. The city council recognizes that these benefits, while substantial, in many cases cannot be measured directly.
(b) The components of the calculations used to establish fees may include, but may not be limited to, the following cost factors, which may be associated with the resolution of stormwater problems, which the utility shall seek to alleviate.
(1) Stormwater management planning and preparation of comprehensive watershed master plans for stormwater management;
(2) Regular inspections of public and private stormwater management facilities and measures and their construction thereof;
(3) Maintenance and improvement of stormwater management facilities that have been accepted by the city for the purpose;
(4) Plan review and inspection of stormwater management plans, measures and practices;
(5) Retrofitting designated watersheds to reduce existing flooding problems or to improve water quality;
(6) Acquisition of interests in land, including easements;
(7) Design and construction of stormwater management facilities and the acquisition of equipment;
(8) Administration and enforcement;
(9) Water quantity and water quality management, including monitoring, surveillance and private maintenance inspection; and
(10) Debt service and financing costs.
(c) The stormwater utility fee shall be based on an "equivalent runoff unit" (ERU) defined as three thousand five hundred (3,500) square feet of impervious area, which is the average impervious area for a single-family home in the city.
(d) Each ERU shall be assessed six dollars ($6.00) per month.
(e) Each single family home shall be assessed one (1) ERU.
(f) ERU’s for commercial and multi-family residential property shall be calculated by the city engineer. Assessed fees shall be six dollars ($6.00) per ERU per month.
(g) Undeveloped properties shall not be assessed a stormwater utility fee.
(h) A credit will be allowed for commercial properties that provide on-site storm water retention facilities that meet the design requirements for a twenty-five-year storm. The credit shall reduce the ERU calculation by twenty-five (25) percent.
(Ord. No. 05-40, 9-19-05)

Sec. 13-117. Billing of stormwater management utility fee.
The stormwater utility fee shall be included on the combined utility system bill. Fees for stormwater management utility shall be due and payable at the same time and in the same manner as fees for water and sewer services as provided in Chapter 15 of this Code.
Failure to pay said stormwater management utility fees shall result in the discontinuation of water and sewer services and other remedies provided by law. For occupied real properties not having active utility accounts, the fee shall be billed to the owners or other persons listed on the real property tax records on a separate bill for the required fee.
(Ord. No. 05-40, 9-19-05)

Sec. 13-118. Sunset clause.
The fees imposed by this article will cease upon completion of the city stormwater improvement projects and repayment of all debt issued for this work.
(Ord. No. 05-40, 9-19-05)

Sec. 13-119. Investment and reinvestment of funds and borrowing.
Funds generated for the utility from fees, bond issues, other borrowing, and other sources shall be utilized only for those purposes for which the utility has been established, including but not limited to: planning; acquisition of interests in land including easements; design and construction of facilities; maintenance of the stormwater system; billing and administration; and water quantity and water quality management, including monitoring, surveillance, private maintenance inspection, construction inspection, and other activities which are reasonably required. Such funds shall be invested and reinvested pursuant to the same procedures and practices established by the city for investment and reinvestment of funds. The city council may use any form of borrowing authorized by law to fund capital acquisitions or expenditures for the utility.
(Ord. No. 05-40, 9-19-05)

Sec. 13-120. Appeals.
Any utility customer, real property owner or other person aggrieved by the amount of utility fee charged with respect to property, or by any other matter arising out of the operation of the utility, may appeal by filing a written explanation of the grounds of the appeal with the city manager, or his designee, within thirty (30) days of the date of the notification of the fee. A decision shall be rendered in writing within twenty (20) days after receipt of the written appeal. Any person aggrieved by an adverse decision may appeal that decision by written request to the city council. Any person aggrieved by an adverse decision of the city council may appeal that decision to the court of common pleas within thirty (30) days of receipt of such decision.
During the review of any of the appeal process set forth above, if timely pursued, no enforcement shall be attempted and the appeal shall act as a supersede staying all enforcement proceedings as set forth in the next section of this article.
Sec. 13-121. Enforcement and penalties.
(a) The city manager or his designee shall be the enforcement officer(s) for the provisions of this article.
(b) It shall be unlawful for any person to violate any provision of this article, and any such violation shall be punished as prescribed in section 1-6 of this Code. Each day a violation continues constitutes a separate offense.
(c) In addition to any other penalties provided in this article, the city manager may assess a civil penalty not to exceed two hundred dollars ($200.00) against any person violating any provision of this article. In setting the amount of the civil penalty, the city manager shall consider the type, duration, and severity of the violation and the responsiveness of the person against whom the penalty is assessed in remedying the violation. Each day a violation continues constitutes a separate violation that may be the subject of such a penalty. The city with the assistance of the city attorney shall make a written demand for payment of the civil penalty upon the person, including an explanation of the basis of the violation and penalty. If full payment of the penalty is not made within thirty (30) days after such demand is mailed or delivered to the person, the city attorney may commence a civil action in the appropriate court to recover the penalty.
(d) In addition to any other penalties or remedies provided in this article, the city, upon the recommendation of the city attorney and approval of the city manager, may institute a civil action in the appropriate court to obtain injunctive compliance with the provisions of this article or remedy or prevent the violation or threatened violation of any provision of this article.

Sec. 13-122. Municipal liability.
Nothing in this article and no action or failure to act under this article shall or may be construed to:
(1) Impose any liability on the city, or its departments, agencies, officers or employees for the recovery of damages; or
(2) Relieve any person engaged in a land-disturbing activity of duties, obligations, responsibilities, or liabilities arising from or incident to operations associated with such activity or imposed by the provisions of this article or the laws and regulations pursuant to which it was adopted.

Sec. 13-123. Severability.
It is declared the intent of the city council that the sections, subsections, paragraphs, sentences, clauses and phrases of this article are severable; and if any such provision shall be declared unconstitutional or otherwise invalid or unenforceable by a court of competent jurisdiction, it shall not affect the validity or enforceability of any remaining provisions of this article, and it is the intent of the council that such provisions shall continue in full force and effect.