

CITY OF MONROE LOCAL ORDINANCE

SOIL EROSION and SEDIMENTATION CONTROL

Revised July 2023

MONROE, NORTH CAROLINA

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ORDINANCE NO. 158 _____

AN ORDINANCE TO PROVIDE FOR THE CONTROL OF SOIL EROSION AND SEDIMENTATION.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Monroe hereby adopts the following ordinance.

158.01 Title

This ordinance may be cited as the City of Monroe Soil Erosion and Sedimentation Control Ordinance.

158.02 Purpose

This ordinance is adopted for the purposes of:

- (a) regulating certain land-disturbing activity to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and
- (b) establishing procedures through which these purposes can be fulfilled.

158.03 Definitions

As used in this ordinance, unless the context clearly indicates otherwise, the following definitions apply:

- (a) Accelerated Erosion - means any increase over the rate of natural erosion as a result of land-disturbing activity.
- (b) Act - means the North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it.
- (c) Adequate Erosion Control Measure, Structure, or Device - means one which controls the soil material within the land area under responsible control of the Person conducting the land-disturbing activity.
- (d) Affiliate – means a Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control of another Person.

- (e) Approving Authority – means the Division or other State or a local government agency that has been delegated erosion and sedimentation plan review responsibilities in accordance with the provisions of the Act.
- (f) Being Conducted - means a land-disturbing activity has been initiated and not deemed complete by the Approving Authority.
- (g) Borrow - means fill material that is required for on-site construction that is obtained from other locations.
- (h) Buffer Zone - means the strip of land adjacent to a lake or natural watercourse.
- (i) Commission - means the North Carolina Sedimentation Control Commission.
- (j) Completion of Construction or Development - means that no further land-disturbing activity is required on a phase of a project except that which is necessary for establishing a permanent ground cover.
- (k) Department - means the City of Monroe Department of Engineering.
- (l) Director - means the Director of the City of Monroe Department of Engineering.
- (m) Discharge Point or Point of Discharge - means that point where runoff leaves a tract of land where a land-disturbing activity has occurred or enters a lake or natural watercourse.
- (n) District - means the Union Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.
- (o) Energy Dissipator - means a structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.
- (p) Erosion - means the wearing away of land surfaces by the action of wind, water, gravity, or any combination thereof.
- (q) Ground Cover - means any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.
- (r) Lake or Natural Watercourse – means any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond.
- (s) Land-disturbing Activity - means any use of the land by any Person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

- (t) Local Government - means any county, incorporated village, town or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the Act.
- (u) Natural Erosion - means the wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.
- (v) Parent – means an affiliate that directly, or indirectly through one or more intermediaries, controls another Person.
- (w) Person - means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, or other legal entity.
- (x) Person Conducting the Land-Disturbing Activity - means any Person who may be held responsible for violation unless expressly provided otherwise by this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act.
- (y) Person Who Violates or Violator, as used in G.S. 113A-64, means: any landowner or other Person who has financial or operational control over the land-disturbing activity; or who has directly or indirectly allowed the activity, and who has failed to comply with any provision of the Act, the rules of this Chapter or any order or local ordinance adopted pursuant to the Act as it imposes a duty upon that Person.
- (z) Plan - means an erosion and sedimentation control plan.
- (aa) Sediment - means solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.
- (bb) Sedimentation - means the process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land-disturbing activity or into a lake or natural watercourse.
- (cc) Siltation - means sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land-disturbing activity; and which has been deposited, or is in suspension in water.
- (dd) Storm Drainage Facilities - means the system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.
- (ee) Stormwater Runoff - means the runoff of water resulting from precipitation in any form.

- (ff) Subsidiary – means an affiliate that is directly, or indirectly through one or more intermediaries, controlled by another Person.
- (gg) Ten-Year Storm - means a rainfall of an intensity that, based on historical data, is predicted by a method acceptable to the Approving Authority to be equaled or exceeded, on the average, once in ten years, and of a duration that will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.
- (hh) Tract - means all contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.
- (ii) Twenty-five Year Storm - means a rainfall of an intensity that, based on historical data, is predicted by a method acceptable to the Approving Authority to be equaled or exceeded, on the average, once in 25 years, and of a duration that will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.
- (jj) Uncovered - means the removal of ground cover from, on, or above the soil surface.
- (kk) Undertaken - means the initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.
- (ll) Velocity - means the speed of flow through a cross section perpendicular to the direction of the main channel at the peak flow of the storm of interest but not exceeding bank full flows.
- (mm) Waste - means surplus materials resulting from on-site land-disturbing activities and being disposed of at other locations.

158.04

Scope and Exclusions

- (a) Geographical Scope of Regulated Land-Disturbing Activity. This ordinance shall apply to land-disturbing activity within the territorial jurisdiction of the City of Monroe and to the extraterritorial jurisdiction of the City of Monroe as allowed by agreement between local governments, the extent of annexation or other appropriate legal instrument or law.
- (b) Exclusions from Regulated Land-Disturbing Activity. Notwithstanding the general applicability of this ordinance to all land-disturbing activity, this ordinance shall not apply to the following types of land-disturbing activity:
 - (1) Activities, including the production and activities relating or incidental to the

production of crops, grains, fruits, vegetables, ornamental and flowering plants, dairy, livestock, poultry, and all other forms of agriculture undertaken on agricultural land for the production of plants and animals useful to man, including, but not limited to:

- (i) forage and sod crops, grain and feed crops, tobacco, cotton, and peanuts.
 - (ii) dairy animals and dairy products.
 - (iii) poultry and poultry products.
 - (iv) livestock, including beef cattle, llamas, sheep, swine, horses, ponies, mules, and goats.
 - (v) bees and apiary products.
 - (vi) fur producing animals.
 - (vii) mulch, ornamental plants, and other horticultural products. For purposes of this section, "mulch" means substances composed primarily of plant remains or mixtures of such substances.
- (2) An Activity undertaken on forestland for the production and harvesting of timber and timber products and conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality (Best Management Practices), as adopted by the North Carolina Department of Agriculture and Consumer Services. If land-disturbing activity undertaken on forestland for the production and harvesting of timber and timber products is not conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality, the provisions of this ordinance shall apply to such activity and any related land-disturbing activity on the tract.
- (3) An activity for which a permit is required under the Mining Act of 1971, Article 7 of Chapter 74 of the General Statutes.
- (4) A land-disturbing activity over which the State has exclusive regulatory jurisdiction as provided in G.S. 113A-56(a).
- (5) An activity which is essential to protect human life during an emergency.
- (6) Activities undertaken to restore the wetland functions of converted wetlands to provide compensatory mitigation to offset impacts permitted under Section 404 of the Clean Water Act.
- (7) Activities undertaken pursuant to Natural Resources Conservation Service standards to restore the wetlands functions of converted wetlands as defined in Title 7 Code of Federal Regulations § 12.2
- (c) Plan Approval Requirement for Land-Disturbing Activity. No Person shall undertake any land-disturbing activity subject to this ordinance without first obtaining a Plan approval from the City of Monroe.

- (d) Protection of Property - Persons conducting land-disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity.
- (e) More Restrictive Rules Shall Apply - Whenever conflicts exist between federal, state, or local laws, ordinance, or rules, the more restrictive provision shall apply.
- (f) Plan Approval Exceptions. Notwithstanding the general requirement to obtain a Plan approval prior to undertaking land-disturbing activity, a Plan approval shall not be required for land-disturbing activity that does not exceed 12,000 square feet in surface area for commercial, industrial, or 1 acre for residential/subdivision development. A Non-Residential Erosion and Sediment Control (ESC) Installation and Maintenance Agreement form will be required for any commercial, industrial, or non-residential development disturbing less than 12,000 square feet. A Single Lot Residential ESC Installation and Maintenance Agreement form will be required for any single family residential development on an individual lot disturbing up to a maximum of one acre. In determining the area, lands under one or diverse ownership being developed as a unit will be aggregated. There is no exception to plan approval for commercial, industrial, or residential/subdivision development that is part of a common plan of development disturbing one acre or greater.

158.05

Mandatory Standards for Land-Disturbing Activity

No land-disturbing activity subject to the control of this ordinance shall be undertaken except in accordance with the following mandatory standards:

- (a) Buffer zone
 - (1) Standard Buffer. No land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land-disturbing activity.
 - (i) Projects On, Over or Under Water. This subdivision shall not apply to a land-disturbing activity in connection with the construction of facilities to be located on, over, or under a lake or natural watercourse.
 - (ii) Buffer Measurement. Unless otherwise provided, the width of a buffer zone is measured horizontally from the edge of the water to the nearest edge of the disturbed area, with the 25 percent of the strip nearer the land-disturbing activity containing natural or artificial means of confining visible siltation.
- (b) Graded Slopes and Fills. The angle for graded slopes and fills shall be no greater than

the angle that can be retained by vegetative cover or other adequate erosion control devices or structures. In any event, slopes left exposed will, within 21 calendar days of completion of any phase of grading, be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints.

- (c) Fill Material. Materials being used as fill shall be consistent with those described in 15A NCAC 13B .0562 unless the site is permitted by the State Department of Environmental Quality, Division of Waste Management, to operate as a landfill. Not all materials described in Section .0562 may be suitable to meet geotechnical considerations of the fill activity and should be evaluated accordingly.
- (d) Ground Cover. Whenever land-disturbing activity that will disturb more than 12,000 square feet is undertaken on a tract for commercial or industrial development and more than 1 acre for a new subdivision development or for new residential development on an individual lot, the Person conducting the land-disturbing activity shall install erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover sufficient to restrain erosion after completion of construction or development. Provisions for a permanent ground cover sufficient to restrain erosion must be accomplished within 15 working days or 30 calendar days, whichever is shorter, following completion of construction or development.
- (e) Prior Plan Approval. No Person shall initiate any land-disturbing activity that will disturb more than 12,000 square feet on a tract for commercial, industrial, or subdivision development or more than an acre for individual lot development for single family residential unless, thirty (30) or more days prior to initiating the activity, a Plan for the activity is filed with and approved by the City of Monroe. .

The City of Monroe shall forward to the Director of the NCDEQ Division of Water Resources a copy of each Plan for a land-disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table of the tract.

- (f) The land-disturbing activity shall be conducted in accordance with the approved erosion and sedimentation control plan.

158.06

Erosion and Sedimentation Control Plans

- (a) Plan Submission. A Plan shall be prepared for all land-disturbing activities subject to this ordinance whenever the proposed activity will disturb more than 12,000 square

feet on a tract excluding individual lot single family residential development addressed in §158.04 (f). No plan shall be considered complete unless accompanied by the required plan review fee and a performance bond in the form of a certified check, cash or irrevocable letter of credit, in an amount deemed sufficient by the City of Monroe Engineering Department to cover all costs of protection or other improvements as required to establish protective cover on the site in conformity with this ordinance. The performance bond shall remain effective until work has been completed, inspected and approved by the Engineering Department.

- (b) Financial Responsibility and Ownership. Plans may be disapproved unless accompanied by an authorized statement of financial responsibility and documentation of property ownership. This statement shall be signed by the Person financially responsible for the land-disturbing activity or his attorney in fact. The statement shall include the mailing and street addresses of the principal place of business of (1) the Person financially responsible, (2) the owner of the land, and (3) any registered agents. If the Person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or non-compliance with the Plan, the Act, this ordinance, or rules or orders adopted or issued pursuant to this ordinance. Except as provided in subsections (c) or (k) of this section, if the applicant is not the owner of the land to be disturbed, the draft erosion and sedimentation control plan must include the owner's written consent for the applicant to submit a draft erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity.
- (c) If the applicant is not the owner of the land to be disturbed and the anticipated land-disturbing activity involves the construction of utility lines for the provision of water, sewer, gas, telecommunications, or electrical service, the draft erosion and sedimentation control plan may be submitted without the written consent of the owner of the land, so long as the owner of the land has been provided prior notice of the project.
- (d) Environmental Policy Act Document. Any Plan submitted for a land-disturbing activity for which an environmental document is required by the North Carolina Environment Policy Act (G.S. §113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The City of Monroe shall promptly notify the Person submitting the Plan that the 30-day time limit for review of the Plan pursuant to this ordinance shall not begin until a complete environmental document is available for review.
- (e) Content. The Plan required by this section shall contain architectural or engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this ordinance. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for Plan preparation may be found in the City of Monroe Standard Specifications and Detail Manual.

- (f) Timeline for Decisions on Plans. The City of Monroe will review each complete Plan submitted to them and within 30 days of receipt thereof will notify the Person submitting the Plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a complete Plan within 30 days of receipt shall be deemed approval. The City of Monroe will review each revised Plan submitted to them and within 15 days of receipt thereof will notify the Person submitting the Plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a revised Plan within 15 days of receipt shall be deemed approval.
- (g) Approval. The City of Monroe shall only approve a Plan upon determining that it complies with all applicable State and local regulations for erosion and sedimentation control. Approval assumes the applicant's compliance with the federal and state water quality laws, regulations and rules. The City of Monroe shall condition approval of Plans upon the applicant's compliance with federal and state water quality laws, regulations and rules. The City of Monroe may establish an expiration date, not to exceed three (3) years, for Plans approved under this ordinance whereby no land-disturbing activity has been undertaken.
- (h) Disapproval for Content. The City of Monroe may disapprove a Plan or draft Plan based on its content. A disapproval based upon a Plan's content must specifically state in writing the reasons for disapproval. If a revised erosion control plan is not re-submitted within thirty (30) calendar days from the date the applicant was notified with the review comments, the erosion control plan shall be considered withdrawn, and a new submittal for the same or substantially the same project shall be required along with the appropriate fee for a new submittal.
- (i) Other Disapprovals. The City of Monroe shall disapprove an erosion and sedimentation control plan if implementation of the plan would result in a violation of rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters. The City of Monroe may disapprove an erosion and sedimentation control plan or disapprove a transfer of a plan under subsection (j) of this section upon finding that an applicant or a parent, subsidiary, or other affiliate of the applicant:
 - (1) Is conducting or has conducted land-disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to this Article and has not complied with the notice within the time specified in the notice.
 - (2) Has failed to pay a civil penalty assessed pursuant to this Article or a local ordinance adopted pursuant to this Article by the time the payment is due.
 - (3) Has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to this Article.
 - (4) Has failed to substantially comply with State rules or local ordinances and regulations adopted pursuant to this Article.

In the event that an erosion and sedimentation control plan or a transfer of a plan is disapproved by the City of Monroe pursuant to subsection (i) of this section, the local government shall so notify the Director of the NCDEQ Division of Energy, Mineral, and Land Resources within 10 days of the disapproval. The City of Monroe shall advise the applicant or the proposed transferee and the Director in writing as to the specific reasons that the plan was disapproved. Notwithstanding the provisions of §158.16(a), the applicant may appeal the local government's disapproval of the plan directly to the Commission.

For purposes of this subsection, an applicant's record or the proposed transferee's record may be considered for only the two years prior to the application date.

- (j) Transfer of Plans. The City of Monroe administering an erosion and sedimentation control program may transfer an erosion and sedimentation control plan approved pursuant to this section without the consent of the plan holder to a successor-owner of the property on which the permitted activity is occurring or will occur as provided in this subsection.
- (1) The City of Monroe may transfer a plan if all of the following conditions are met:
 - (i) The successor-owner of the property submits to the local government a written request for the transfer of the plan and an authorized statement of financial responsibility and documentation of property ownership.
 - (ii) The City of Monroe finds all of the following:
 - a. The plan holder is one of the following:
 1. A natural person who is deceased.
 2. A partnership, limited liability corporation, corporation, or any other business association that has been dissolved.
 3. A Person who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur.
 4. A Person who has sold the property on which the permitted activity is occurring or will occur.
 - b. The successor-owner holds title to the property on which the permitted activity is occurring or will occur.
 - c. The successor-owner is the sole claimant of the right to engage in the permitted activity.
 - d. There will be no substantial change in the permitted activity.
 - (2) The plan holder shall comply with all terms and conditions of the plan until such time as the plan is transferred.
 - (3) The successor-owner shall comply with all terms and conditions of the plan once the plan has been transferred.
 - (4) Notwithstanding changes to law made after the original issuance of the plan, the City of Monroe may not impose new or different terms and conditions in the plan without the prior express consent of the successor-owner. Nothing

in this subsection shall prevent the City of Monroe from requiring a revised plan pursuant to G.S. 113A-54.1(b).

- (k) Notice of Activity Initiation. No Person may initiate a land-disturbing activity before notifying the agency that issued the Plan approval of the date that land-disturbing activity will begin.
- (l) Preconstruction Conference. When deemed necessary by the Approving Authority, a preconstruction conference may be required and noted on the approved plan.
- (m) Display of Plan Approval. A Plan approval issued under this Article shall be prominently displayed until all construction is complete, all temporary measures have been removed, all permanent sedimentation and erosion control measures are installed, and the site has been stabilized. A copy of the approved plan shall be kept on file at the job site.
- (n) Required Revisions. After approving a Plan, if the City of Monroe, either upon review of such Plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, the City of Monroe shall require a revised Plan. Pending the preparation of the revised Plan, work shall cease or shall continue under conditions outlined by the appropriate authority. If following commencement of a land-disturbing activity pursuant to an approved Plan, the City of Monroe determines that the Plan is inadequate to meet the requirements of this ordinance, the City of Monroe may require any revision of the Plan that is necessary to comply with this ordinance.
- (o) Amendment to a Plan. Applications for amendment of a Plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the City of Monroe, the land-disturbing activity shall not proceed except in accordance with the Plan as originally approved.
- (p) Failure to File a Plan. Any Person engaged in land-disturbing activity who fails to file a Plan in accordance with this ordinance, or who conducts a land-disturbing activity except in accordance with provisions of an approved Plan shall be deemed in violation of this ordinance.
- (q) Self-Inspections. The landowner, the financially responsible party, or the landowner's or the financially responsible party's agent shall perform an inspection of the area covered by the plan after each phase of the plan has been completed and after establishment of temporary ground cover in accordance with G.S. 113A-57(2). In addition, weekly and rain-event self-inspections are required by federal regulations, that are implemented through the NPDES Construction General Permit No. NCG 010000. The Person who performs the inspection shall maintain and make available a record of the inspection at the site of the land-disturbing activity. The record shall set out any significant deviation from the approved erosion control plan, identify any measures that may be required to correct the deviation, and document the completion

of those measures. The record shall be maintained until permanent ground cover has been established as required by the approved erosion and sedimentation control plan. The inspections required by this subsection shall be in addition to inspections required by G.S. 113A-61.1.

Where inspections are required by §158.06(q) of this Ordinance or G.S. 113A-54.1(e), the following apply:

- (1) The inspection shall be performed during or after each of the following phases of the plan;
 - (i) initial installation of erosion and sediment control measures;
 - (ii) clearing and grubbing of existing ground cover;
 - (iii) completion of any grading that requires ground cover;
 - (iv) completion of all land-disturbing activity, construction, or development, including permanent ground cover establishment and removal of all temporary measures; and
 - (v) transfer of ownership or control of the tract of land where the erosion and sedimentation control plan has been approved and work has begun. The new owner or Person in control shall conduct and document inspections until the project is permanently stabilized as set forth in Sub-Item (iii) of this Item.
- (2) Documentation of self-inspections performed under Item (1) of this Rule shall include:
 - (i) Visual verification of ground stabilization and other erosion control measures and practices as called for in the approved plan;
 - (ii) Verification by measurement of settling basins, temporary construction entrances, energy dissipators, and traps.
 - (iii) The name, address, organization affiliation, telephone number, and signature of the person conducting the inspection and the date of the inspection shall be included, whether on a copy of the approved erosion and sedimentation control plan or an inspection report. A template for an example of an inspection and monitoring report is provided on the DEMLR website at: <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms>. Any relevant licenses and certifications may also be included. Any documentation of inspections that occur on a copy of the approved erosion and sedimentation control plan shall occur on a single copy of the plan and that plan shall be made available on the site.
 - (iv) A record of any significant deviation from any erosion or sedimentation control measure from that on the approved plan. For the purpose of this Rule, a "significant deviation" means an omission, alternation, or relocation of an erosion or sedimentation control measure that prevents it from performing as intended. The record shall include measures required to correct the significant deviation, along with documentation of when those measures were taken. Deviations from the approved plan may also be recommended to enhance the

intended performance of the sedimentation and erosion control measures.

Except as may be required under federal law, rule or regulation, no periodic self-inspections or rain gauge installation is required on individual residential lots where less than one acre is being disturbed on each lot.

158.07 Basic Control Objectives

An erosion and sedimentation control Plan may be disapproved if the Plan fails to address the following control objectives:

- (a) Identify Critical Areas - On-site areas which are subject to severe erosion, and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation, are to be identified and receive special attention.
- (b) Limit Time of Exposure - All land-disturbing activities are to be planned and conducted to limit exposure to the shortest time specified in G.S. 113A-57, the rules of the aforementioned Chapter, or as directed by the Approving Authority.
- (c) Limit Exposed Areas - All land-disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time.
- (d) Control Surface Water - Surface water runoff originating upgrate of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure.
- (e) Control Sedimentation - All land-disturbing activity is to be planned and conducted to prevent off-site sedimentation damage.
- (f) Manage Stormwater Runoff - Plans shall be designed so that any increase in velocity of stormwater runoff resulting from a land-disturbing activity will not result in accelerated erosion of the receiving stormwater conveyance or at the point of discharge. Plans shall include measures to prevent accelerated erosion within the project boundary and at the point of discharge.

158.08 Design and Performance Standards

- (a) Erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the latest edition of the United States Department of Agriculture (USDA), Natural Resources Conservation Service's "National Engineering Field Handbook", or other acceptable calculation procedures.

Storm Water Outlet Protection

- (a) Intent. Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity.
- (b) Performance standard. Persons shall conduct land-disturbing activity so that the post construction velocity of the 10-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:
- (1) the velocity established by the Maximum Permissible Velocities Table set out within this subsection; or
 - (2) the velocity of the ten-year storm runoff in the receiving watercourse prior to development.

If condition (1) or (2) of this Paragraph cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the “prior to development” velocity by 10%.

Maximum Permissible Velocities Table

The following is a table for maximum permissible velocity for storm water discharges in feet per second (F.P.S.) and meters per second (M.P.S.):

<u>Material</u>	F.P.S.	M.P.S.
Fine sand (noncolloidal)	2.5	0.8
Sandy loam (noncolloidal)	2.5	0.8
Silt loam (noncolloidal)	3.0	0.9
Ordinary firm loam	3.5	1.1
Fine gravel	5.0	1.5
Stiff clay (very colloidal)	5.0	1.5
Graded, loam to cobbles (noncolloidal)	5.0	1.5
Graded, silt to cobbles (Colloidal)	5.5	1.7
Alluvial silts (noncolloidal)	3.5	1.1
Alluvial silts (colloidal)	5.0	1.5
Coarse gravel (noncolloidal)	6.0	1.8
Cobbles and shingles	5.5	1.7
Shales and hard pans	6.0	1.8

Source - Adapted from recommendations by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight

alignment. For sinuous channels, multiply allowable velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

- (c) Acceptable Management Measures - Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. The City of Monroe, NC recognizes that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives, while not exhaustive, are to:
- (1) Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious;
 - (2) Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in place of closed drains and high velocity paved sections;
 - (3) Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge;
 - (4) Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining; and
 - (5) Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.
- (d) Exceptions - This rule shall not apply where it can be demonstrated to the City of Monroe, NC that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

158.10 Borrow and Waste Areas

If the same Person conducts the land-disturbing activity and any related borrow or waste activity, the related borrow or waste activity shall constitute part of the land-disturbing activity, unless the borrow or waste activity is regulated under the Mining Act of 1971, G.S. 74, Article 7, or is a landfill regulated by the Division of Waste Management. If the land-disturbing activity and any related borrow or waste activity are not conducted by the same Person, they shall be considered by the Approving Authority as separate land-disturbing activities.

158.11 Access and Haul Roads

Temporary access and haul roads, other than public roads, constructed or used in connection with any land-disturbing activity shall be considered a part of such activity.

158.12 Operations in Lakes or Natural Watercourses

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall minimize the extent and duration of disruption of the stream channel. Where relocation of a stream forms an essential part of the proposed activity, the relocation shall minimize changes in the stream flow characteristics.

158.13 Responsibility for Maintenance

During the development of a site, the Person conducting the land-disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this Ordinance, the Act, or any order adopted pursuant to this ordinance or the Act. After site development, the landowner or Person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

158.14 Additional Measures

Whenever the City of Monroe, NC determines that accelerated erosion and sedimentation continues despite the installation of protective practices, they shall direct the Person conducting the land-disturbing activity to take additional protective action necessary to achieve compliance with the conditions specified in the Act or its rules.

158.15 Fees

The City of Monroe may establish a fee schedule for the review and approval of Plans. A fee shall be charged for each Plan review in accordance with a fee schedule adopted by the City of Monroe City Council.

158.16 Plan Appeals

- (a) Except as provided in §158.16 (b) of this ordinance, the appeal of a disapproval or approval with modifications of a Plan shall be governed by the following provisions:
 - (1) The disapproval or modification of any proposed Plan by the City of Monroe, NC shall entitle the Person submitting the Plan to a public hearing before the

Board of Adjustment if such Person submits written demand for a hearing within 15 days after receipt of written notice and completes the necessary forms and pays the required appeals fee of disapproval or modifications. Such written request and completed forms shall be submitted to the Clerk of the Board of Adjustment or his or her designee. Forms shall be available at the City of Monroe Administrative Office, or as directed by the City of Monroe Engineering Department. A fee for such public hearing shall be in accordance with the fee schedule adopted by the City of Monroe City Council. No request shall be considered complete unless accompanied by such fee.

Notice of the Board of Adjustment public hearing shall be sent first class mail to the applicant at least 10 days prior to the public hearing and to any person who has submitted a written request to receive such notice at least 10 days prior to the date of the public hearing. The hearing shall be held no later than 30 days after the receipt of said written request.

A hearing shall be conducted by the Board of Adjustment. A concurring vote per the Board of Adjustment's officially adopted by-laws will be necessary to reverse any order, requirement, decision, or determination of any official charged with the enforcement of this ordinance, or to decide in favor of an appellant any matter upon which is required to pass or to grant variance from the provisions of this ordinance. The City shall keep minutes of the proceedings, showing the votes of each member upon each question and the attendance of each member at such hearings. The final disposition of the City shall be based on findings of fact.

- (2) If the City of Monroe upholds the disapproval or modification of a proposed Plan following the hearing, the Person submitting the Plan shall then be entitled to appeal the City of Monroe's decision to the Commission as provided in G.S. 113A-61(c) and 15A NCAC 4B .0118(d)
- (b) In the event that a Plan is disapproved pursuant to §158.06 (i) of this ordinance, the applicant may appeal the City of Monroe's disapproval of the Plan directly to the Commission.

158.17

Inspections and Investigations

- (a) Inspection. Agents, officials, or other qualified persons authorized by the City of Monroe, will periodically inspect land-disturbing activities to ensure compliance with the Act, this ordinance, or rules or orders adopted or issued pursuant to this ordinance, and to determine whether the measures required in the Plan are effective in controlling erosion and sedimentation resulting from land-disturbing activity. Notice of the right to inspect shall be included in the certificate of approval of each Plan.

- (b) Willful Resistance, Delay or Obstruction. No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the City of Monroe, while that person is inspecting or attempting to inspect a land-disturbing activity under this section.
- (c) Notice of Violation. If the City of Monroe determines that a Person engaged in land-disturbing activity has failed to comply with the Act, this ordinance, or rules, or orders adopted or issued pursuant to this ordinance, a notice of violation shall be served upon that Person. The notice may be served by any means authorized under GS 1A-1, Rule 4. The notice shall specify a date by which the Person must comply with the Act, or this ordinance, or rules, or orders adopted pursuant to this ordinance, and inform the Person of the actions that need to be taken to comply with the Act, this ordinance, or rules or orders adopted pursuant to this ordinance. Any Person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this ordinance. If the Person engaged in the land-disturbing activity has not received a previous notice of violation under this section, the City of Monroe shall offer assistance in developing corrective measures. Assistance may be provided by referral to a technical assistance program on behalf of the Approving Authority, referral to a cooperative extension program, or by the provision of written materials such as the State Department of Environmental Quality guidance documents. The notice of violation may be served in the manner prescribed for service of process by G.S. 1A-1, Rule 4, and shall include information on how to obtain assistance in developing corrective measures.
- (d) Investigation. The City of Monroe, shall have the power to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this ordinance, and who presents appropriate credentials for this purpose to enter at reasonable times, any property, public or private, for the purpose of investigating and inspecting the sites of any land-disturbing activity.
- (e) Statements and Reports. The City of Monroe, shall also have the power to require written statements, or filing of reports under oath, with respect to pertinent questions relating to land-disturbing activity.

158.18

Penalties

- (a) Civil Penalties
 - (1) Civil Penalty for a Violation. Any Person who violates any of the provisions of this ordinance, or rule or order adopted or issued pursuant to this ordinance, or who initiates or continues a land-disturbing activity for which a Plan is required except in accordance with the terms, conditions, and provisions of an approved Plan, is subject to a civil penalty. The maximum civil penalty amount that the City of Monroe may assess per violation is five thousand dollars (\$5,000.00). A civil penalty may be assessed from the date of the

violation. Each day of a continuing violation shall constitute a separate violation. When the Person has not been assessed any civil penalty under this subsection for any previous violation, and that Person abated continuing environmental damage resulting from the violation within 180 days from the date of the notice of violation, the maximum cumulative total civil penalty assessed under this subsection for all violations associated with the land-disturbing activity for which the erosion and sedimentation control plan is required is twenty-five thousand dollars (\$25,000).

- (2) Civil Penalty Assessment Factors. The Engineering Director or his/her designee of the City of Monroe shall determine the amount of the civil penalty based upon the following factors:
 - (i) the degree and extent of harm caused by the violation,
 - (ii) the cost of rectifying the damage,
 - (iii) the amount of money the violator saved by noncompliance,
 - (iv) whether the violation was committed willfully, and
 - (v) the prior record of the violator in complying or failing to comply with this ordinance.

- (3) Notice of Civil Penalty Assessment. The Engineering Director or his/her designee of the City of Monroe shall provide notice of the civil penalty amount and basis for assessment to the Person assessed. The notice of assessment shall be served by any means authorized under G.S. 1A-1, Rule 4. A notice of assessment by the City of Monroe shall direct the violator to either pay the assessment, contest the assessment within 30 days by filing a petition for hearing with the City of Monroe (as directed by procedures within the local ordinances or regulations adopted to establish and enforce the erosion and sedimentation control program), or file a request with the City of Monroe for remission of the assessment within 30 days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the North Carolina General Statutes and a stipulation of the facts on which the assessment was based.

- (4) Final Decision: The final decision on contested assessments shall be made by the City Council of the City of Monroe in accordance with (the local ordinances or regulations adopted to establish and enforce the erosion and sedimentation control program.)

- (5) Appeal of Final Decision. Appeal of the final decision of the governing body of the City of Monroe shall be to the General Court of Justice of the Union County where the violation occurred. Such appeals must be made within 30 days of the final decision of the governing body of the City of Monroe.

- (6) Remission of Civil Penalties. A request for remission of a civil penalty imposed under G.S. 113A-64 may be filed with the City of Monroe within 30 days of receipt of the notice of assessment. A remission request must be

accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the General Statutes and a stipulation of the facts on which the assessment was based. The following factors shall be considered in determining whether a civil penalty remission request will be approved:

- (i) Whether one or more of the civil penalty assessment factors in G.S. 113A-64(a)(3) were wrongly applied to the detriment of the petitioner.
- (ii) Whether the petitioner promptly abated continuing environmental damage resulting from the violation.
- (iii) Whether the violation was inadvertent or a result of an accident.
- (iv) Whether the petitioner had been assessed civil penalties for any previous violations.
- (v) Whether payment of the civil penalty will prevent payment for necessary remedial actions or would otherwise create a significant financial hardship.
- (vi) The assessed property tax valuation of the petitioner's property upon which the violation occurred, excluding the value of any structures located on the property.

(7) Collection. If payment is not received within 30 days after it is due, the City of Monroe may institute a civil action to recover the amount of the assessment. The civil action may be brought in the Superior Court of the county where the violation occurred, or the violator's residence or principal place of business is located. Such civil actions must be filed within three (3) years of the date the assessment was due. An assessment that is not contested and a remission that is not requested is due when the violator is served with a notice of assessment. An assessment that is contested or a remission that is requested is due at the conclusion of the administrative and judicial review of the assessment.

(8) Credit of Civil Penalties. The clear proceeds of civil penalties collected by the City of Monroe under this subsection shall be remitted to the Civil Penalty and Forfeiture Fund in accordance with G.S. 115C-457.2. Penalties collected by the City of Monroe may be diminished only by the actual costs of collection. The collection cost percentage to be used shall be established and approved by the North Carolina Office of State Budget and Management on an annual basis, based upon the computation of actual collection costs by the City of Monroe for the prior fiscal year.

(b) Criminal Penalties. Any Person who knowingly or willfully violates any provision of this ordinance, or rule or order adopted or issued by the Commission or a local government, or who knowingly or willfully initiates or continues a land-disturbing activity for which a Plan is required except in accordance with the terms, conditions, and provisions of an approved Plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed \$5,000 as provided in G.S. 113A-64.

158.19 Injunctive Relief

- (a) Violation of Local Program. Whenever the governing body has reasonable cause to believe that any Person is violating or threatening to violate any ordinance, rule, regulation or order adopted or issued by the City of Monroe, or any term, condition, or provision of an approved Plan, it may, either before or after the institution of any other action or proceeding authorized by this ordinance, institute a civil action in the name of the City of Monroe, for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the General Court of Justice of Union County in which the violation is occurring or is threatened.

- (b) Abatement of Violation. Upon determination by a court that an alleged violation is occurring or is threatened, the court shall enter any order or judgment that is necessary to abate the violation, to ensure that restoration is performed, or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to the proceedings from any civil or criminal penalty prescribed for violations of this ordinance.

158.20 Restoration After Non-Compliance

The City of Monroe, may require a Person who engaged in a land-disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

159.21 Severability

If any section or section or sections of this ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

159.22 Effective Date

This ordinance becomes effective on _____.