TITLE 18

WATER AND SEWERS

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CHAPTER 1

STORMWATER MANAGEMENT REGULATIONS

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18-101. General. (1) Title. These regulations shall be known, cited and referred to as the "Storm Water Regulations of the Town of Nolensville, Tennessee."

(2) Preamble. The Town of Nolensville Board of Mayor and Alderman finds and declares that it is in the best interest of the citizens of the Town of Nolensville to regulate the discharge of storm water, alleviate the effects of flooding and facilitate compliance with the Water Quality Act of 1977, the Water Quality Act of 1987 and the Clean Water Act of 1977. In furtherance of same, the Town of Nolensville Board of Mayor and Alderman hereby adopts these regulations governing storm water discharges, storm water management, flood control, erosion prevention, and water quality protection.

(3) Purpose and authority. (a) Protect, maintain, and enhance the environment of the Town of Nolensville and the public health, safety and the general welfare of the citizens of the town, by controlling discharges of pollutants to the storm water system and to maintain and improve the
quality of the receiving waters into which the storm water outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the town.

(b) Enable the Town of Nolensville to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR 122.26 for storm water discharges.

(c) Allow the Town of Nolensville to exercise the powers granted in Tennessee Code Annotated, § 68-221-1105 or as amended by the State of Tennessee.

(d) The Town of Nolensville shall have authority to implement and supplement these regulations by reference to appropriate guidance or other related materials. Guidance or other related materials may be modified to meet the objectives and policies of this regulation, so long as such modifications to guidance or other related materials are not contrary or beyond the intent of these regulations. The guidance or other related materials shall not in any way endorse specific commercially available products. However, they may refer to performance specifications, class of devices, construction, or management practice.

(e) The Town of Nolensville shall have right-of-entry upon the property subject to this regulation and any permit/document issued hereunder. The Town of Nolensville shall be provided ready access to all parts of the premises for the purposes of inspection, monitoring, sampling, inventory, records examination and copying, and the performance of any other duties necessary to determine compliance with this regulation.

(f) Where a property, site or facility has security measures in place that require proper identification and clearance before entry into its premises, the owner/operator shall make necessary arrangements with its security personnel so that, upon presentation of suitable identification, the Town of Nolensville will be permitted to enter without delay for the purposes of performing specific responsibilities.

(g) The Town of Nolensville shall have the right to utilize on the owner/operator property such devices as are necessary to conduct sampling and/or metering of the person's storm water operations or discharges.

(h) Any temporary or permanent obstruction to safe and easy access to the areas to be inspected and/or monitored shall be removed promptly by the owner/operator at the written or verbal request of the Town of Nolensville. The costs of clearing such access shall be borne by the owner/operator. The town reserves the right to determine and impose inspection schedules necessary to enforce the provisions of these regulations.

(4) Applicability and jurisdiction. The storm water regulations shall govern all properties within the incorporated limits of Nolensville, Tennessee.
(5) **Exemptions.** The following activities are exempt from the requirements of these regulations:

(a) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources;

(b) Agricultural land management activities; and

(c) Any silviculture activity that is consistent with an approved timber management plan prepared or approved by the State of Tennessee.

(6) **Duty to mitigate.** The owner/operator shall take all reasonable steps to minimize or prevent any discharge in violation of these regulations.

(7) **Duty to provide information.** The owner/operator shall furnish to the Town of Nolensville any information that is requested to determine compliance with these regulations or other information.

(8) **Other information.** When the owner/operator becomes aware that the owner/operator failed to submit any relevant facts or submitted incorrect information in the notice of intent or in any other report to the Town of Nolensville, the owner/operator shall promptly submit such facts or information.

(9) **Savings provision.** These regulations shall not be construed as altering, modifying, vacating or nullifying any action now impending or any rights of obligations obtained by any person, firm or corporation through approval of a preliminary plat by the Town of Nolensville Planning Commission or through the approval of any grading/land disturbance permit or any other lawful action of the town prior to the adoption of these regulations. (as added by Ord. #04-17, Dec. 2004, and amended by Ord. #08-07, July 2008)

**18-102. Standards.** (1) **Storm water quality.** (a) There shall be no distinctly visible floating scum, oil or other matter contained in the storm water discharge.

(b) The storm water discharge must not cause an objectionable color contrast in the receiving stream.

(c) Development will be required to minimize the impact to storm water quality by applying structural and/or nonstructural management practices selected to address site-specific conditions. The goal for water quality treatment shall be eighty percent (80%) removal of total suspended solids from the first flush volume, defined by land use characteristics or at least 0.5 inches of rainfall where not defined.

(d) Redevelopment activities will be required to follow storm water quality requirements.

(e) No land disturbance activities, whether by private or public action, shall be performed in a manner that will negatively impact storm water quality whether by flow restrictions, increased runoff, or by diminishing channel or floodplain storage capacity. Erosion or sedimentation, or transport of other pollutants or forms of pollution, due to various land development activities must be controlled.
(2) Storm water quantity. (a) New development shall meet a storm water quantity level of service defined by:
   (i) Designing road catch basins and connecting culverts to convey the 10-year, 24-hour design storm runoff.
   (ii) Designing bridges, channels and cross-drains to pass the 25-year, 24-hour design storm runoff. Calculations shall also be provided for the 100-year, 24-hour design storm.
(b) Storm water infrastructure shall be designed in a way that:
   (i) Critical service roads are not inundated by more than three (3) inches of water over one-half the roadway width under a 100-year, 24-hour design storm event.
   (ii) Other new roads shall be designed to have no more than six (6) inches of road overtopping at the 25-year, 24-hour design storm event.
(c) Re-development activities will be required to follow storm water quantity requirements.
(d) No land disturbance activities, whether by private or public action, shall be performed in a manner that will negatively impact storm water quantity whether by flow restrictions, increased runoff, or by diminishing channel or floodplain storage capacity. Erosion or sedimentation, or transport of other pollutants or forms of pollution, due to various land development activities must be controlled.

(3) Allowable discharges. (a) Pursuant to the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) program administered by the Tennessee Department of Environment and Conservation (TDEC) illicit discharges to the MS4 are being defined as illegal. This is being accomplished through the identification of allowable non-storm water discharges into the MS4 in the best interest of Nolensville, Tennessee.
(b) Non-storm water discharge means any discharge to the Municipal Separate Storm Sewer System except as permitted by section (d).
(c) Except as hereinafter provided, all non-storm water discharges into the Municipal Separate Storm Sewer System are prohibited and declared to be unlawful.
(d) Unless the Town of Nolensville has identified them as a source of pollutants to the "Waters of the State of Tennessee," the following non-storm water discharges into the Municipal Separate Storm Sewer System are lawful:
   (i) Discharges from emergency fire fighting activities
   (ii) Rising ground waters
   (iii) Uncontaminated groundwater infiltration to separate storm sewer systems (as defined by 40 CFR 35.2005 (20))
   (iv) Uncontaminated pumped ground water
(v) Discharges from potable water sources as required for system maintenance
(vi) Water line flushing
(vii) Foundation, footing, and crawl space drains and pumps
(viii) Air conditioning condensate
(ix) Landscape and lawn irrigation
(x) Uncontaminated springs
(xi) Individual residential vehicle washing
(xii) Flows from riparian habitats and wetlands
(xiii) Dechlorinated swimming pool discharges
(xiv) Street wash waters resulting from normal street cleaning operations
(xv) Controlled flushing storm water conveyances (controlled by appropriate BMPs)
(xvi) Discharges within the constraints of a National Pollutant Discharge Elimination System (NPDES) permit from the Tennessee Department of Environment and Conservation (TDEC)
(xvii) Other special discharges as approved by The Town of Nolensville (as added by Ord. #04-17, Dec. 2004)

18-103. **Storm water runoff controls.** (1) Land disturbance activities may not aggravate upstream or downstream flooding.

(2) Detention and retention facilities or other flow attenuation methods shall be sized such that the post-development peak discharge rate is less than or equal to the pre-development peak discharge rate for the first flush, 2 year, 5 year, 10 year, 25 year, 50 year, and 100 year, 24 hour design storms. The facilities shall be designed such that the cumulative post-development discharge volume is less than or equal to the cumulative pre-development discharge volume during the critical time for the first flush, 2 year, 5 year, 10 year, 25 year, 50 year, and 100 year, 24 hour design storms. The critical time shall be between the hours of 11 and 18 of the 24 hour design storm unless otherwise specified by a town accepted watershed plan.

(3) Water quality measures such as forebays or other BMPs shall be incorporated into detention facilities for added quality benefit and ease of maintenance.

(4) Consideration shall be given to the use of regional facilities.

(5) Fee in lieu of detention shall be evaluated on a site-by-site basis. The fee shall include cost of construction and fair market value of the land required for detention facility construction. The use of the fee in lieu of detention does not exempt the requirement of water quality BMPs.

(6) Detention and retention facilities shall not be located in the right-of-way nor in a waterway natural area.
(7) Detention and retention facilities shall only be located on commonly owned areas or parcels, and shall not be located on parcels or lots intended for single family residential uses. (as added by Ord. #04-17, Dec. 2004)

18-104. **Waterway natural areas.** (1) General waterway natural area requirements. (a) Waterway natural areas shall be implemented in major subdivisions as open space. In any development other than a major subdivision where open space is not provided, the waterway natural areas shall be on private lots.

(b) Waterway natural areas width shall be at least one hundred (100) feet perpendicular from the top of bank on each side of the waterway where tributary area is greater than or equal to five (5) square miles.

(c) Waterway natural areas width shall be at least seventy-five (75) feet perpendicular from the top of bank on each side of the waterway where the tributary area is greater than or equal to one (1) square mile and less than five (5) square miles.

(d) Waterway natural areas width shall be at least fifty (50) feet perpendicular from the top of bank on each side of the waterway where the tributary area is less than one (1) square mile.

(e) Waterway natural areas shall be applied along all intermittent and perennial stream waterways as determined by the town, state, or USGS topographic information. This determination shall be conducted at the pre-application conference phase, however the town reserves the right to identify a waterbody until the preliminary plat approval.

(f) Waterway natural areas shall be recorded on the plat for parcels subject to plat revision.

(g) On parcels not subject to plat revisions, the waterway natural area shall be applied as a setback from the top of bank.

(h) WNA designations shall not reduce base site area and may be included as part of the required open space.

(i) All site development plans and plats prepared for recording shall:

(i) Define the boundaries of any waterway natural area on the subject property and be labeled as "waterway natural area"

(ii) Provide a note to reference any waterway natural area stating: "There shall be no clearing, grading, construction or disturbance of vegetation except as permitted by the Town of Nolensville Engineering Department."

(iii) Provide a note to reference any protective covenants governing all waterway natural area stating: "Any waterway natural area shown hereon is subject to protective covenants which may be found in the land records and which restrict disturbance and use of these areas."
(j) All waterway natural area must be protected during development activities. Construction layout survey must include staking and labeling the waterway natural area. Use a combination of stakes and flagging to ensure adequate visibility.

(k) Minor landscaping is allowed within the waterway natural area to repair erosion, damaged vegetation, or other problems identified. Landscaping or stabilization activities must have prior approval by the engineering department.

(2) Permitted waterway natural area uses. (a) If the adjacent land use involves subsurface discharges or surface application from a wastewater treatment system that serves more than one household or a non-residential use, effluent will not be allowed to discharge in the WNA except as provided herein. Where the TDEC has granted an NPDES wastewater permit, the permittee is allowed to convey the effluent through the WNA to the waterway designated in the NPDES permit.

(b) Septic tanks must be outside of waterway natural area. Septic field lines may be allowed within the WNA to within twenty-five (25) feet from stream top of bank or as determined by the Williamson County Department of Sewage Disposal Management, whichever provides the greatest distance from top of stream bank.

(c) No buildings shall be allowed in the waterway natural area with the exception of passive recreation areas. (as added by Ord. #04-17, Dec. 2004)

18-105. Storm water system long-term operation and maintenance. (1) The maintenance requirements for permanent storm water runoff control facilities shall be the responsibility of the owner/operator.

(2) Residential developments that form a homeowners association, trust indenture, or other management entity, that entity shall be responsible for long term operation and maintenance of storm water infrastructure located in drainage easements or open space.

(3) An engineer shall provide a storm water infrastructure long-term operation and maintenance plan with an opinion of probable costs and schedule, subject to approval by the Town of Nolensville. The long term operation and maintenance plan shall be in writing, shall be in recordable form, and shall, in addition to any other terms deemed necessary by the Town of Nolensville, contain a provision permitting inspection at any reasonable time by the Town of Nolensville of the facilities deemed critical to the public welfare.

(4) The Town of Nolensville will have the authority to maintain facilities not properly maintained and to recover costs associated with the maintenance from the owner/operator.

(5) Operation and maintenance plans for residential development shall be submitted and recorded with the final plat.
(6) Operation and maintenance plans for non-residential development shall be submitted and recorded prior to the issuance of a land disturbance permit.

(7) Upon approval of the storm water management facilities by the Town of Nolensville, the facility owner/operator(s) shall demonstrate the ability to garner and apply the financial resources necessary for long-term maintenance requirements. The funding mechanism shall be in a form approved by the Town of Nolensville. The town will only approve funding mechanism(s) for long-term maintenance responsibilities that can be demonstrated to be permanent or transferable to another entity with equivalent longevity.

(8) Long term operation and maintenance provisions or the storm water infrastructure shall be documented in the restrictive covenants.

(9) Inspections of storm water management facilities shall be conducted semi-annually by the owner/operator for serviceability and shall be documented. The owner/operator shall submit to Nolensville a report no later than the first day of July upon completion of construction, and the bi-annually during the life of the facility. The report shall include the facility's condition relative to the intent of the design and shall demonstrate that the owner/operator has fulfilled the funding mechanism requirement. Storm water management facilities shall be inspected every five (5) years from the time of construction by an engineer. The inspection include a certification by the engineer that the facility is functioning as intended or shall provide a schedule of repairs and maintenance activities necessary to meet the intended use of the facility. (as added by Ord. #04-17, Dec. 2004)

18-106. Land disturbance permits. (1) Applicability. (a) Every owner/operator will be required to obtain a land disturbance permit from the Town of Nolensville in the following cases:

(i) Activities resulting in greater than five thousand (5,000) square feet of land disturbance;
(ii) Whenever excavation, fill, or any combination thereof will exceed five hundred (500) cubic yards of material.
(iii) Where land disturbance activities pose a threat to water, public health or safety;

(b) No building permit shall be issued until the applicant has obtained a land disturbance permit where the same is required by these regulations.

(2) Land disturbance permit application. (a) Application for a land disturbance permit for subdivisions and non-residential sites that require a "Tennessee General Permit for Storm Water Discharges from Construction Activities" shall require the following be submitted to the Town of Nolensville for review and approval:
(i) The Notice of Intent (NOI) submitted to TDEC for coverage under the "Tennessee General Permit for Storm Water Discharges from Construction Activities."
(ii) The Storm Water Pollution Prevention Plan prepared for coverage under the "Tennessee General Permit for Storm Water Discharges from Construction Activities."
(iii) Separate sheets, stamped by an engineer at a scale not to exceed one (1) inch equal to fifty (50) feet, for preconstruction, construction, and post construction storm water BMPs.

(b) Application for a land disturbance permit for single lot residential sites that require a "Tennessee General Permit for Storm Water Discharges from Construction Activities" shall require the following be submitted to the Town of Nolensville for review and approval:

(i) The Notice of Intent (NOI) submitted to TDEC for coverage under the "Tennessee General Permit for Storm Water Discharges from Construction Activities."
(ii) The Storm Water Pollution Prevention Plan prepared for coverage under the "Tennessee General Permit for Storm Water Discharges from Construction Activities."
(iii) Separate sheets, at a scale not to exceed one (1) inch equal to fifty (50) feet, for preconstruction, construction, and post construction storm water BMPs.

Application for a land disturbance permit on sites with land disturbance activities greater than five thousand (5,000) square feet but less than one (1) acre and does not require a "Tennessee General Permit for Storm Water Discharges from Construction Activities" shall require the submittal to the Town of Nolensville a Nolensville Erosion and Sediment Control Checklist signed by the applicant.

(3) Fee schedule. (a) Single lot - A storm water review and inspection fee of one hundred fifty dollars ($150) per lot is payable at building permit application for residential lots which are part of a platted subdivision, or exceed one (1) acre of disturbed area.

(b) Subdivision - A storm water review and inspection fee of three hundred dollars ($300) is required for all subdivisions payable at issuance of a land disturbance permit.

(c) Non-residential site plans - A storm water review and inspection fee of three hundred dollars ($300) is required for all non-residential site plans. (as added by Ord. #04-17, Dec. 2004)

18-107. Inspections. Inspections shall be performed to ensure that vegetation, erosion and sediment control measures and other protective
measures identified in the stormwater pollution prevention plan are kept in good and effective operating condition.

(1) **Owner/operator inspections.** Inspections required for all development requiring a land disturbance permit.
   (a) Inspections already required. (TDEC, etc ...)
   (b) Nolensville may request submission of inspection documentation.
   (c) Final storm water management BMPs must be inspected and certified that the BMPs are in accordance with the approved plans prior to certificate of occupancy.

   Additional inspections for major and minor subdivisions, site plans or other major developments:
   (d) Pre-construction storm water management BMPs must be inspected and certified that the BMPs are in accordance with the approved plans by an engineer, licensed in the State of Tennessee on sites greater than one (1) acre or part of a larger development.
   (e) Construction storm water management BMPs must be inspected and certified that the BMPs are in accordance with the approved plans by an engineer, licensed in the State of Tennessee, prior to granting building permit on sites with land disturbance activities greater than one (1) acre.
   (f) Post construction BMPs must be inspected and certified that the BMPs are in accordance with the approved plans by an engineer, licensed in the State of Tennessee, prior to release of surety.
   (g) Hard copy and digital as-built plans will be required in the State of Tennessee Plans system with the North American Datum 1983 (NAD83) and North American Vertical Datum (NAVD) of 1988.

(2) **Town inspections.** (a) Town inspections may include, but are not limited to, the following:
   (i) An initial inspection prior to storm water pollution prevention plan approval;
   (ii) A bury inspection prior to burial of any underground drainage structure;
   (iii) Erosion prevention and sediment control inspections as necessary to ensure effective control of erosion and sedimentation;
   (iv) A final inspection when all work, including installation of storm management facilities, has been completed; and
   (v) Periodic inspections to ensure storm water facilities are being maintained. (as added by Ord. #04-17, Dec. 2004)

18-108. **Enforcement.** (1) **Enforcement authority.** The Town of Nolensville shall have the authority to issue notices of violation and citations,
to impose the civil penalties provided in this section, and to institute appropriate actions or proceedings at law or equity for the enforcement of these regulations.

(2) **Notification of violation.** (a) Written notice. Whenever the town engineer, the director of codes compliance or his designee finds that any owner/operator or any other person discharging storm water has violated or is violating these regulations or a permit or order issued hereunder, he may serve upon such person written notice of the violation (NOV). In addition to the NOV, whenever the town engineer, the director of codes compliance or his designee finds that any permittee, person, company or facility owning, occupying or operating on any premises has violated or is violating these regulations or a permit or order issued hereunder, he may revoke any permit issued by the town. Any permit mistakenly issued in violation of any applicable federal, state or local law or regulation may be revoked. Notice of such revocation shall be in accordance with the same notification requirements for NOVs.

Within a time limit established by this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the Town of Nolensville. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

(b) **Consent orders.** The town engineer or director of codes compliance or his designee is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (c) and (e) below.

(c) **Compliance order.** When the town engineer or director of codes compliance or his designee finds that any person has violated or continues to violate these regulations or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate structures, devices, be installed or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring and management practices.

(d) **Cease and desist orders.** When the town engineer or director of codes compliance or his designee finds that any person has violated or continues to violate these regulations or any permit or order issued
hereunder, he may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

(i) Comply forthwith; or

(ii) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

(iii) Conflicting standards. Whenever there is a conflict between any standard contained in these regulations and in the BMP manual adopted by the Town of Nolensville pursuant to these regulations, the strictest standard shall prevail.

(e) Show cause hearing. The town engineer or director of codes compliance or his designee may order any person who violates these regulations or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the show cause hearing, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. (as added by Ord. #04-17, Dec. 2004)

18-109. Penalties. Any person who shall commit any act declared unlawful under these regulations, who violates any provision of these regulations, who violates the provisions of any permit issued pursuant to these regulations, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the town engineer or director of codes compliance or his designee, shall be guilty of a civil offense.

(1) Penalties. Under the authority provided in Tennessee Code Annotated, § 68-221-1106, the Town of Nolensville declares that any person violating the provisions of these regulations may be assessed a civil penalty by the town engineer or director of codes compliance or his designee of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation. The penalties may be assessed beyond schedules applied in a NOV or other schedules issued to the property owner or other person responsible for unauthorized activity defined in these regulations.

(2) Measuring civil penalties. In assessing a civil penalty, the town engineer or director of codes compliance or his designee may consider:

(a) The harm done to the public health or the environment;

(b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;

(c) The economic benefit gained by the violator;
(d) The amount of effort put forth by the violator to remedy this violation;
(e) Any unusual or extraordinary enforcement costs incurred by the municipality;
(f) The amount of penalty established by ordinance or resolution for specific categories of violations; and
(g) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(3) Recovery of damages and costs. The Town of Nolensville may recover damages and costs in addition to civil penalties.

(a) The Town of Nolensville may recover all damages proximately caused by the violator to Nolensville, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, these regulations, or any other actual damages caused by the violation.
(b) The Town of Nolensville may recover the costs to Nolensville for maintenance of storm water facilities when the user of such facilities fails to maintain them as required by these regulations.
(c) In the event that there are penalties assessed by the state against the Town of Nolensville caused by or as a result of the act or omission of any person, company or facility, said person, company or facility shall be assessed the equivalent amount of such penalty. This shall include, but is not limited to, penalties for improper disposal or illegal dumping, or illicit connection into the municipal separate storm sewer system.
(d) If corrective action, including maintenance delinquency, is not taken in the time specified, or within a reasonable time if not time is specified, the Town of Nolensville may undertake the corrective action, and the cost of such corrective action shall be the responsibility of the person, company, facility, owner and/or developer. The cost of abatement and restoration shall be borne by the owner of the property, with such costs invoiced to the owner of the property. If said invoice is not paid within ninety (90) days of receipt of such invoice, the Town of Nolensville shall have the authority to place a lien upon and against the property. If the lien is not removed within ninety (90) days, the Town of Nolensville is authorized to take all legal action necessary to enforce the lien as a judgment, including without limitation, enforcing the lien in an action brought in a court of competent jurisdiction.

(4) Other remedies. The Town of Nolensville may bring legal action to enjoin the continuing violation of these regulations, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(5) Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or
criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

(6) Emergency orders and abatement. The town engineer or director of codes compliance or his designee may order the abatement of any discharge from any source to the storm water conveyance system when, in the opinion of the town engineer or director of codes compliance or his designee, the discharge causes or threatens to cause a condition which presents an imminent danger to the public health, safety or welfare, or the environment, or a violation of the NPDES permit. In emergency situations where the property owner or other responsible party is unavailable and time constraints are such that service of a notice and order to abate cannot be effected without presenting an immediate danger to the public health, safety or welfare, or the environment or a violation of the NPDES permit, the town may perform or cause to be performed such work as shall be necessary to abate said threat or danger. The costs of any such abatement shall be borne by the property owner and shall be collected in accordance with the provisions herein. (as added by Ord. #04-17, Dec. 2004)

18-110. Authority of storm water appeals board. (1) Pursuant to Tennessee Code Annotated, § 68-221-1106, The Town of Nolensville hereby creates a board to hear and decide appeals of these storm water regulations.

(a) Said board shall be called the "storm water appeals board".

(b) The storm water appeals board shall consist of five (5) members, appointed by the town mayor, subject to confirmation by the board of mayor and alderman. Each member must be a resident of the Town of Nolensville. There shall be one (1) member that is representative of the following groups if available:

(i) Member of the board of mayor and alderman
(ii) Current home owner
(iii) Member of the profession of engineering
(iv) Member of the profession of agriculture
(v) Member of the residential commercial development community

(c) Each member shall be appointed to a term of three (3) years, with the first term of members a-c lasting two (2) years, and the first term of member d-e lasting three (3) years. Thereafter the term of each member shall be three (3) years, except the member of the board of mayor and alderman, whose term shall run concomitant with his/her elected term of office.

(d) The storm water appeals board shall meet as needed.

(e) Each meeting of the storm water appeals board shall be memorialized in a set of minutes that will be kept in a well-bound book by the town engineer.

(f) The storm water appeals board is hereby authorized to hear and decide appeals of any order, decision or ruling of the town engineer.
or codes official or his designee issued pursuant to these regulations. Following the hearing on an application for appeal, the storm water appeals board may affirm, reverse, modify or remand for more information, the order, decision or ruling of the town engineer or codes official or his designee. In no event shall the storm water appeals board issue a decision that in any way conflicts or contradicts these regulations or any other federal, state or local laws or regulations relating to storm water, wastewater, zoning or planning.

(g) The storm water appeals board will hear and make determinations on requests for variances pertaining to floodplain, erosion and sediment control, water quality and quantity and storm water related regulations from the strict application of the provisions of the storm water regulations and zoning ordinance.

(2) Any person aggrieved by the imposition of a civil penalty, damage assessment, or decision by the town engineer, town code official or his/her designee as provided by these regulations may appeal said penalty, damage assessment, or decision to the storm water appeals board, created pursuant to these regulations.

(3) The appeal shall be in writing and filed along with a non-refundable application fee of one hundred dollars ($100.00) with the town engineer within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

(4) Upon receipt of an appeal, the storm water appeals board shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a newspaper of general circulation. Ten (10) days notice by registered mail shall also be provided to the appellant, such notice to be sent to the address provided by the appellant on the notice of appeal. The decision of the storm water appeals board shall be final.

(5) Appealing decisions of the storm water appeals board. Any alleged violator may appeal a decision of the storm water appeals board pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8. (as added by Ord. #04-17, Dec. 2004, and amended by Ord. #08-07, July 2008)

18-111. **Administration and miscellaneous.** (1) In order that storm water quality and quantity may be managed in accordance with these purposes and policies, these regulations are hereby adopted.

(2) Should any article, section, subsection, clause or provision of this storm water management regulation be declared by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the regulation as a whole or any part thereof other than the part declared to be unconstitutional or invalid, each article, section clause and provision being declared severable.
(3) In their interpretation and application, the provisions of these regulations shall be held to be the minimum requirements for promotion of the public health, safety and general welfare.

(4) It is established that these regulations are not intended to interfere with, abrogate or annul any regulations, statutes, or laws. In any case where these regulations impose restrictions different from those imposed by any other provision of these regulations, or any other regulation, law or statues, whichever provisions are more restrictive or impose higher standards shall control.

(5) For the purpose of these regulations, certain numbers, abbreviations, tern, and words used herein shall be used, interpreted, and defined as set forth in § 18-112.

Where words within these regulations have not been defined, the standard dictionary definition shall prevail.

(6) Unless the context clearly indicates to the contrary, words used in the present tense include the future tense; words in the plural include the singular, words used in the masculine include the feminine. (as added by Ord. #04-17, Dec. 2004)

18-112. Definitions. (1) "Agricultural land management activities." The practice of cultivating the soil, producing crops, and raising livestock for the preparation and marketing of the resulting products.

(2) "As-built plans." Means drawings depicting conditions as they were actually constructed.

(3) "Base flood." The flood having a one percent (1%) chance of being equaled or exceeded in any given year. While this statistical event may occur more frequently, it may also be known as the "100-year flood event".

(4) "Base site area." The area of a site, as determined by an actual on-site survey, within a single zoning district (if more than one district is present they should be treated as separate parcels) less:

(a) any land within the ultimate right-of-way of existing roads;

and

(b) existing utility rights-of-way for pipelines or high tension lines; and

(c) any land which has been cut-off from the main parcel by a highway, rail-line, or stream so that common access and use is impossible, and where separate use is not feasible; and

(d) any land which is subject to any covenants, easements, or restrictions against building except for areas included solely in either stream, drainageway, flood plain, or wetland preservation and/or restoration easements that are held in perpetuity by a non-profit organization or agency with IRS 501 C 3 status devoted to such matters; and,

(e) any required bufferyards; and
(5) "Best management practice (BMP)." This may refer collectively or specifically to a structural or non-structural practice intended to address water quantity or quality as best available.

(6) "BMP treatment train." A technique for progressively selecting various storm water management practices to address water quality, by which groups of practices may be used to achieve a treatment goal while optimizing effectiveness, maintenance needs, and space.

(7) "Bridge." A man made conveyance of storm water flows.

(8) "Building." A structure built, maintained, or intended for use for the shelter or enclosure of persons, animals, or property of any kind. The term is inclusive of any part thereof. Where independent units with separate entrances are divided by party walls, each unit is a building.

(9) "Channel." A natural or artificial watercourse of perceptible extent, with definite bed and banks to confine and conduct continuously or periodically flowing water. Channel flow is that water which is flowing within the limits of the defined channel.

(10) "Clearing." To remove vegetation, trees, debris, or structures.

(11) "Culvert." A man made conveyance of storm water flows. This may include a pipe or other constructed conveyance.

(12) "Cross-drain." A culvert used to convey flow under a road or other obstruction between channels or surface flow.

(13) "Critical area." A site subject to erosion or sedimentation as a result of cutting, filling, grading, or other disturbance of the soil; a site difficult to stabilize due to exposed subsoil, steep slope, extent of exposure, and other conditions.

(14) "Critical service roads." Designated county evacuation routes, or other access to police, fire, emergency medical services, hospitals, or shelters.

(15) "Cut." Portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to the excavated surface.

(16) "Design storm event." A hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a storm water facility.

(17) "Detention." The temporary delay of storm runoff prior to discharge into receiving waters. This includes facilities with a normal pool elevation.

(18) "Developer." Any individual, firm, corporation, association, partnership, or trust involved in commencing proceedings to effect development of land for himself or others. This includes any legal or engineering representative of the "developer."

(19) "Development." Any man-made change to improved or unimproved real property, including but not limited to, buildings, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of
materials (as defined as materials of like nature stored in whole or in part for more than six (6) months).

(20) "Discharge." To dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the municipal separate storm sewer system.

(21) "Drainage basin." A part of the surface of the earth that is occupied by and provides surface water runoff into a storm water management system (MS4 or waters of the state), which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

(22) "Engineer." An engineer duly registered, licensed or otherwise authorized by the State of Tennessee to practice in the field of civil engineering.

(23) "Erosion prevention and sediment control (EP&SC)." See "erosion prevention" and "sediment control."

(24) "Erosion." The removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.

(25) "Erosion prevention." Practices implemented to prevent, through shielding, binding or other mechanism(s), the suspension of soil particles, often associated with erosion prevention and sedimentation control.

(26) "Excavation." See cut.

(27) "Existing grade." The slope or elevation of existing ground surface prior to cutting or filling.

(28) "Existing construction." Any structure for which the "start of construction" commenced before the effective date of these regulations.

(29) "Fill." Portion of land surface or area to which soil, rock, or other materials have been or will be added; height above original ground surface after the material has been or will be added.

(30) "Finished grade." The final slope or elevation of the ground surface, after cutting or filling.

(31) "First flush." The runoff that occurs at the beginning of a rain event.

(32) "Flood or flooding." Water from a river, stream, watercourse, lake, or other body of standing water that temporarily overflows and inundates adjacent lands and which may affect other lands and activities through increased surface water levels and/or increased groundwater level.

(33) "Flood insurance rate map (FIRM)." An official map of the Town of Nolensville, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to Nolensville.
(34) "Flood insurance study." The official report provided by the Federal Emergency Management Agency. The report contains elevations of the base flood, floodway widths, flood velocities, and flood profiles.

(35) "Flood plain." The relatively flat or lowland area adjoining a river, stream, watercourse, lake, or other body of standing water which has been or may be covered temporarily by floodwater. For purposes of this manual, the flood plain is defined as the 100-year floodplain having a one percent (1%) chance of being equaled or exceeded in any given year.

(36) "Floodproofing." A combination of structural provisions, changes, or adjustments to properties and structures subject to flooding primarily for the reduction or elimination of flood damages to properties, water and sanitary facilities, structures, and contents of buildings in a flood hazard area.

(37) "Floodway." That portion of the stream channel and adjacent flood plain required for the passage or conveyance of a 100-year flood discharge. The floodway boundaries are placed to limit encroachment in the flood plain so that a 100-year flood discharge can be conveyed through the flood plain without materially increasing (less than one foot) the water surface elevation at any point and without producing hazardous velocities or conditions. This is the area of significant depths and velocities and due consideration should be given to effects of fill, loss of cross sectional flow area, and resulting increased water surface elevations.

(38) "Floodway fringe." That portion of the flood plain lying outside the floodway.

(39) "Floor." The top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

(40) "Flow attenuation." To lessen the volume, stage, discharge rate, or velocity of the storm water runoff.

(41) "Grading." Any operation or occurrence by which the existing site elevations are changed; or where any ground cover, natural, or man-made, is removed; or any watercourse or body of water, either natural or man-made, is relocated on any site, thereby creating an unprotected area. This includes stripping, cutting, filling, stockpiling, or any combination thereof, and shall apply to the land in its cut or filled condition. Grading activities may only be performed with a land disturbance permit.

(42) "Historic structure designation." Any structure that is: listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historical district or a district preliminarily determined by the Secretary to qualify as a registered
historic district; or listed individually on a state or local inventory of historic places which have been approved by the Secretary of the Interior.

(43) "Illicit connection." Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

(44) "Illicit discharge." Defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

(45) "Impervious cover." A term applied to any ground or structural surface that water cannot penetrate or through which water penetrates with great difficulty.

(46) "Intermittent stream waterways." Natural or man-made watercourses (streams) which cease to flow for sustained periods during a normal rainfall year (typically during the later summer through the fall months).

(47) "Land disturbing activity." Any activity on property that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, and excavation.

(48) "Municipal separate storm sewer system (MS4)." Defined at 40 CFR 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(a) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the Clean Water Act (CWA) that discharges to waters of the state;

(b) Designed or used for collecting or conveying storm water,

(c) Which is not a combined sewer; and

(d) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

(49) "New construction." Structures for which the "start of construction" commenced on or after the effective date of these regulations. The term also includes any subsequent improvements to such structures.

(50) "Nonpoint source." Any source of pollutant(s) that is not a point source. Examples are sheet flow from pastures and runoff from paved areas.

(51) "NPDES permit." National Pollution Discharge Elimination System permit issued pursuant to 33 U.S.C. 1342.
(52) "NRCS." National Resources Conservation Service.

(53) "One hundred (100)-year flood." A flood that has an average frequency of occurrence of once in one hundred (100) years, determined from an analysis of floods on a particular watercourse and other watercourses in the same general region. Statistically, it has a one percent (1%) chance of occurring in any given year. See "base flood."

(54) "Owner/operator." Any and all persons, natural or artificial, including any individual, firm or association and any municipal or private corporation organized or existing under the laws of this or any other state or country that holds property or performs land disturbance activities.

(55) "Passive recreational activities." Including, but not limited to, parks, areas for hiking, arboretums, nature areas, wildlife sanctuaries, picnic areas, garden plots, cemeteries and beaches.

(56) "Perennial stream waterways." Watercourses (streams) that generally flow year-round. However, they may go dry in droughty years.

(57) "Permittee." Any person, firm, or any other legal entity to whom a site disturbance, grading, building or other related permit is issued in accordance with the Town of Nolensville regulations.

(58) "Point source." Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

(59) "Redevelopment." Development improvements that have a value less than fifty percent (50%) of the current assessed value and/or increases the floor area by less than twenty-five (25%). Demolition and reconstruction is considered development and not redevelopment. Note: this is different from significant redevelopment.

(60) "Regional storm water management facility." A device or management practice, typically but not always a detention or retention pond, with a tributary area with more than one development site. This may be multiple homogenous land use areas or an area of various land uses.

(61) "Retention." The prevention of storm runoff from direct discharge into receiving waters. Examples include systems which discharge through percolation, exfiltration, filtered bleed-down and evaporation process.

(62) "SCS." Soil Conservation Service.

(63) "Sediment." Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, or gravity as a product of erosion.

(64) "Sediment control." Practices implemented to manage through filtering, settling or other mechanism(s) to remove suspended particles (soil, organic or mineral) from water, often associated with erosion prevention and sedimentation control.
"Significant redevelopment." Development improvements that have a value greater than fifty percent (50%) of the current assessed value, increases the floor area than twenty-five percent (25%) or more, any change in the impervious surface area, redirects the flow of storm water in any way, modifies the storm sewer system, or changes the storm water characteristics. Demolition and reconstruction is considered development and not redevelopment. Note: this is different from redevelopment.

"Site." All contiguous land and bodies of water in one ownership, graded or proposed for grading or development as a unit, although not necessarily at one time.

"Slope." Degree of deviation of a surface from the horizontal, usually expressed in percent or ratio.

"Small municipal separate storm sewer system." Defined at 40 CFR 122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special district, under state law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the Clean Water Act (CWA) that discharges to waters of the state, but is not defined as "large" or "medium" municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

"Storm water." Is defined at 40 CFR 122.26(b)(13) and means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Stripping." Any activity that removes or significantly disturbs the vegetative surface cover, including clearing and grubbing operations.

"Structure." See building.

"Tributary area." The drainage area upstream of a specified point including all overland flow that directly or indirectly connects down-slope to the specified point.

"Waters of the state." All water, public or private, on or beneath the surface of the ground, except those bodies of water retained within single ownership which do not join with natural surface or underground waters.

"Waterway natural area." A strip of undisturbed native vegetation, either original or reestablished, that borders streams and rivers, ponds and lakes, wetlands, and springs.

"Wetland." Those areas that are inundated or saturated by surface or ground water at a frequency or duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typical to life in
saturated soil conditions. Wetlands generally include, but are not limited to, swamps, marshes, bogs and similar areas.

(76) "Wet weather conveyance." Man-made or natural watercourses that flow only in direct response to precipitation runoff in their immediate locality, and whose channels are above the groundwater table, and which do not support fish and aquatic life. (as added by Ord. #04-17, Dec. 2004)

18-113. Performance bonds. (1) The Town of Nolensville may, at its discretion, require the submittal of a performance security or performance bond prior to issuance of a permit in order to ensure that the storm water practices are installed by the permit holder as required by the approved storm water management plan in accordance with the Nolensville Zoning Ordinance and Subdivision Regulations.

(2) The Town of Nolensville Planning Commission will administer the guarantee of improvements. Applicable provisions of Section IV, "Assurance for completion and maintenance of improvements," of the Nolensville Subdivision Regulations, concerning the type of acceptable performance bonds and the Town of Nolensville Planning Commission's rights under the required bonds are incorporated herein and are made part of these regulations. (as added by Ord. #04-17, Dec. 2004)
CHAPTER 2

BEST MANAGEMENT PRACTICES MANUAL

SECTION

CHAPTER 3
FLOODPLAIN REGULATIONS

SECTION
18-301. Statutory authorization.
18-304. Administration.

18-301. Statutory authorization. The legislature of the State of Tennessee has in §§ 13-7-201 through 13-7-211, Tennessee Code Annotated, delegated the responsibility to local governmental units to adopt regulations designed to promote the health, safety, and general welfare of its citizenry. Therefore, The Nolensville, Tennessee, Mayor, and Board of Aldermen, does ordain as follows:

(1) Findings of fact. (a) The Nolensville Mayor and Board of Aldermen wishes to establish eligibility in the National Flood Insurance Program and in order to do so must meet the requirements of 60.3(d), of the Federal Insurance Administration Regulations found at 44 CFR Ch. 1 (10-1-04 Edition) and subsequent amendments.

(b) Areas of Nolensville are subject to periodic inundation which could result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

(c) These flood losses are caused by the cumulative effect of obstructions in floodplains, causing increases in flood heights and velocities; and by uses in flood hazard areas which are vulnerable to floods; or construction which is inadequately elevated, flood proofed, or otherwise unprotected from flood damages

(2) Statement of purpose. It is the purpose of this ordinance to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas. This ordinance is designed to:

(a) Restrict or prohibit uses which are vulnerable to water or erosion hazards, or which cause any damaging increases in erosion, flood heights, or velocities;

(b) Require that uses vulnerable to floods, including community facilities, be protected against flood damage;
(c) Control the alteration of natural floodplains, stream channels, and natural protective barriers which accommodate flood waters;
(d) Control filling, grading, dredging and other development which may increase erosion or flood damage, and;
(e) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards.

(3) Objectives. The objectives of this ordinance are:
(a) To protect human life and health;
(b) To minimize expenditure of public funds for costly flood control projects;
(c) To minimize the need for rescue and relief efforts associated with flooding;
(d) To minimize prolonged business interruptions;
(e) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, street and bridges located in floodable areas;
(f) To help maintain a stable tax base by providing for the sound use and development of flood prone areas;
(g) To ensure that potential buyers are notified that property is in a floodable area; and,
(h) To establish eligibility for participation in the National Flood Insurance Program. (as added by Ord. #08-10, Oct. 2008)

18-302. Definitions. Unless specifically defined below, words or phrases used in this ordinance shall be interpreted as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

(1) "Accessory structure" -- shall represent a subordinate structure to the principal structure and, for the purpose of this section, shall conform to the following:
(a) Accessory structures shall not be used for human habitation.
(b) Accessory structures shall be designed to have low flood damage potential.
(c) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
(d) Accessory structures shall be firmly anchored to prevent flotation which may result in damage to other structures.
(e) Service facilities such as electrical and heating equipment shall be elevated or flood proofed.

(2) "Act" -- means the statutes authorizing the National Flood Insurance Program that are incorporated in 42 U.S.C. 4001-4128.
"Addition (to an existing building)" -- means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

"Appeal" -- means a request for a review of the building official's interpretation of any provision of this ordinance or a request for a variance.

"Area of shallow flooding" -- means a designated AO or AH Zone, on a community's Flood Insurance Rate Map (FIRM) with one percent (1%) or greater annual chance of flooding to an average depth of one to three feet (1'-3') where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

"Area of special flood-related erosion hazard" -- is the land within a community which is most likely to be subject to severe flood-related erosion losses. The area may be designated as Zone E, on the Flood Hazard Boundary Map (FHBM). After the detailed evaluation of the special flood-related erosion hazard area in preparation for publication of the FIRM, Zone E, may be further refined.

"Area of special flood hazard" -- is the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A, on the FHBM. After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A, usually is refined into Zones A, AO, AH, A1-30, AE, or A99.

"Base flood" -- means the flood having a one percent (1%) chance of being equaled or exceeded in any given year.

"Basement" -- means that portion of a building having its floor subgrade (below ground level) on all sides.

"Breakaway wall" -- means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

"Building" -- for purposes of this section, means any structure built for support, shelter, or enclosure for any occupancy or storage. (See "structure.")

"Development" -- means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

"Elevated building" -- means a non-basement building built to have the lowest floor of the lowest enclosed area elevated above the ground level by means of fill, solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwater, pilings, columns, piers, or shear walls adequately anchored so as not to impair the structural integrity of the building during a base flood event.
(14) "Emergency flood insurance program," or "emergency program" -- means the program as implemented on an emergency basis in accordance with section 1336, of the Act. It is intended as a program to provide a first layer amount of insurance on all insurable structures before the effective date of the initial FIRM.

(15) "Erosion" -- means the process of the gradual wearing away of land masses. This peril is not per se covered under the program.

(16) "Exception" -- means a waiver from the provisions of this ordinance which relieves the applicant from the requirements of a rule, regulation, order or other determination made or issued pursuant to this ordinance.

(17) "Existing construction" -- means any structure for which the "start of construction" commenced before the effective date of the first floodplain management code or ordinance adopted by the community as a basis for that community's participation in the National Flood Insurance Program (NFIP).

(18) "Existing manufactured home park or subdivision" -- means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the first floodplain management code or ordinance adopted by the community as a basis for that community's participation in the National Flood Insurance Program (NFIP).

(19) "Existing structures." (See "existing construction.")

(20) "Expansion to an existing manufactured home park or subdivision" -- means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

(21) "Flood or flooding" -- means a general and temporary condition of partial or complete inundation of normally dry land areas from:
(a) The overflow of inland or tidal waters;
(b) The unusual and rapid accumulation or runoff of surface waters from any source.

(22) "Flood elevation determination" -- means a determination by the administrator of the water surface elevations of the base flood, that is, the flood level that has a one percent (1%) or greater chance of occurrence in any given year.

(23) "Flood elevation study" -- means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

(24) "Flood Hazard Boundary Map (FHBM)" -- means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of areas of special flood hazard have been designated as Zone A.
(25) "Flood Insurance Rate Map (FIRM)" -- means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

(26) "Flood insurance study" -- is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles as well as the flood boundary map and the water surface elevation of the base flood.

(27) "Floodplain" or "flood prone area" -- means any land area susceptible to being inundated by water from any source. (See definition of "flooding.")

(28) "Floodplain management" -- means the operation of an overall program of corrective and preventive measures for reducing flood damage, including, but not limited to, emergency preparedness plans, flood control works and floodplain management regulations.

(29) "Flood protection system" -- means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

(30) "Floodproofing" -- means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

(31) "Flood-related erosion" -- means the collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or by some similarly unusual and unforeseeable event which results in flooding.

(32) "Flood-related erosion area," or "flood-related erosion prone area" -- means a land area adjoining the shore of a lake or other body of water, which due to the composition of the shoreline or bank and high water levels or wind-driven currents, is likely to suffer flood-related erosion damage.

(33) "Flood-related erosion area management" -- means the operation of an overall program of corrective and preventive measures for reducing flood-related erosion damage, including, but not limited to, emergency preparedness plans, flood-related erosion control works and flood plain management regulations.

(34) "Floodway" -- means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base
flood without cumulatively increasing the water surface elevation more than one foot (1').

(35) "Floodway fringe" -- that area of the floodplain lying outside the floodway but still lying within the one hundred (100) year floodplain.

(36) "Floor" -- means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

(37) "Freeboard" -- means a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings and the hydrological effect of urbanization of the watershed.

(38) "Highest adjacent grade" -- means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

(39) "Historic structure" -- means any structure that is:
   (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminary determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
   (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
   (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
   (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: By an approved state program as determined by the Secretary of the Interior, or directly by the Secretary of the Interior in states without approved programs.

(40) "Levee" -- means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

(41) "Levee system" -- means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

(42) "Lowest floor" -- means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely
for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

(43) "Manufactured home" -- means a structure, transportable in one (1) or more sections, which is built on a permanent chassis and designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

(44) "Manufactured home park or subdivision" -- means a parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

(45) "Map" -- means the Flood Hazard Boundary Map (FHBAM) or the Flood Insurance Rate Map (FIRM) for a community issued by the agency.

(46) "Mean-sea-level" -- means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD) or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

(47) "National Geodetic Vertical Datum (NGVD)" as corrected in 1929, is a vertical control used as a reference for establishing varying elevations within the floodplain.

(48) "New construction" -- any structure for which the "start of construction" commenced on or after the effective date of this ordinance. The term also includes any subsequent improvements to such structure.

(49) "New manufactured home park or subdivision" -- means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of this ordinance and includes any subsequent improvements to such structure.

(50) "100-year flood." (See "base flood."

(51) "Person" -- includes any individual or group of individuals, corporation, partnership, association, or any other entity, including state and local governments and agencies.

(52) "Recreational vehicle" -- means a vehicle which is:
   (a) Built on a single chassis;
   (b) Four hundred (400) square feet or less when measured at the largest horizontal projections;
   (c) Designed to be self-propelled or permanently towable by a light duty truck; and designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.
(53) "Regulatory floodway" -- means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

(54) "Riverine" -- means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

(55) "Special hazard area" -- means an area having special flood, mudslide (i.e., mudflow) and/or flood-related erosion hazards, and shown on an FHB or FIRM as Zone A, AO, A1-30, AE, A99, or AH.

(56) "Start of construction" -- includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations; nor does it include the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

(57) "State coordinating agency" -- (Tennessee Department of Economic and Community Development, Local Planning Assistance Office) means the agency of the state government, or other office designated by the governor of the state or by state statute at the request of the administrator to assist in the implementation of the national flood insurance program in that state.

(58) "Structure" -- for purposes of this section, means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

(59) "Substantial damage" -- means damage of any origin sustained by a structure whereby the cost of restoring the structure to it before damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

(60) "Substantial improvement" -- means any repairs, reconstruction, rehabilitation, addition or other improvement of a structure, taking place during a five (5) year period, in which the cumulative cost equals or exceeds fifty percent (50%) of the market value of the structure before the "start of construction" of the improvement. The market value of the structure should be
(a) The appraised value of the structure prior to the start of the initial repair or improvement, or
(b) In the case of damage, the value of the structure prior to the damage occurring.

This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed.

For the purpose of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include either:

(a) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been pre-identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions and not solely triggered by an improvement or repair project or;
(b) Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

(61) "Substantially improved existing manufactured home parks or subdivisions" -- is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty percent (50%) of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

(62) "Variance" -- is a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance where specific enforcement would result in unnecessary hardship.

(63) "Violation" -- means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certification, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

(64) "Water surface elevation" -- means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas. (as added by Ord. #08-10, Oct. 2008)

18-303. General provisions. (1) Application. This chapter shall apply to all areas within the incorporated area of Nolensville, Tennessee. All site activity shall also comply with Nolensville Ordinance #00-05, related to construction regulations within the floodplain.

(2) Basis for establishing the areas of special flood hazard. The areas of special flood hazard identified on the Nolensville, Tennessee, Federal
Emergency Management Agency, Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM), Community Panel Numbers 47187C0235F and 47187C0245F, dated September 29, 2006, along with all supporting technical data, are adopted by reference and declared to be a part of this ordinance.

3. Requirement for development permit. A development permit shall be required in conformity with this ordinance prior to the commencement of any development activity.

4. Compliance. No structure or use shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this ordinance and other applicable regulations.

5. Abrogation and greater restrictions. This ordinance is not intended to repeal, abrogate, or impair any existing easement, covenant, or deed restriction. However, where this ordinance conflicts or overlaps with another, whichever imposes the more stringent restrictions shall prevail.

6. Interpretation. In the interpretation and application of this ordinance, all provisions shall be:
   a. Considered as minimum requirements;
   b. Liberally construed in favor of the governing body, and;
   c. Deemed neither to limit nor repeal any other powers granted under state statutes.

7. Warning and disclaimer of liability. The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the flood hazard areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the Town of Nolensville, Tennessee, or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

8. Penalties for violation. Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a misdemeanor punishable as other misdemeanors as provided by law. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the Town of Nolensville, Tennessee, from taking such other lawful actions to prevent or remedy any violation. (as added by Ord. #08-10, Oct. 2008)

18-304. Administration. (1) Designation of building inspector. The administrator or his designee is hereby appointed to administer and implement the provisions of this ordinance.

(2) Permit procedures. Application for a development permit shall be made to the administrator or his designee on forms furnished by him prior to
any development activity. The development permit may include, but is not limited to the following: plans in duplicate drawn to scale, showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities. Specifically, the following information is required:

(a) Application stage. (i) Elevation in relation to mean-sea-level of the proposed lowest floor (including basement) of all buildings where BFEs are available, or to the highest adjacent grade when applicable under this ordinance.

(ii) Elevation in relation to mean-sea-level to which any nonresidential building will be floodproofed where BFEs are available, or to the highest adjacent grade when applicable under this ordinance.

(iii) Certificate from a registered professional engineer or architect that the nonresidential floodproofed building will meet the floodproofing criteria in subsection (b) below.

(iv) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(See (b) below.)

(b) Construction stage. Within unnumbered A Zones, where flood elevation data are not available, the mayor or his designee shall record the elevation of the lowest floor on the development permit. The elevation of the lowest floor shall be determined as the measurement of the lowest floor of the building and the highest adjacent grade. For all new construction and substantial improvements, the permit holder shall provide to the administrator an as-built certification of the regulatory floor elevation or floodproofing. Within unnumbered A Zones, where flood elevation data is not available, the elevation of the lowest floor shall be determined as the measurement of the lowest floor of the building relative to the highest adjacent grade.

Any lowest floor certification made relative to mean-sea-level shall be prepared by or under the direct supervision of, a registered land surveyor and certified by same. When floodproofing is utilized for a non-residential building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.

Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The administrator shall review the above-referenced certification data. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being allowed to proceed. Failure to submit the certification or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.
(3) Duties and responsibilities of the administrator. Duties of the administrator or his designee shall include, but not be limited to:

(a) Review of all development permits to assure that the requirements of this ordinance have been satisfied, and that proposed building sites will be reasonably safe from flooding.

(b) Advice to permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit. This shall include section 404, of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.

(c) Provide notification to adjacent communities and the Tennessee Department of Economic and Community Development, Local Planning Office, prior to any alteration or relocation of a watercourse, and submission of evidence of such notification to the Federal Emergency Management Agency.

(d) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to the Federal Emergency Management Agency to ensure accuracy of community flood maps through the letter of map revision process. Assure that the flood carrying capacity within an altered or relocated portion of any watercourse is maintained.

(e) Record the actual elevation (in relation to mean-sea-level or highest adjacent grade, whichever is applicable) to which the new or substantially improved buildings have been floodproofed, in accordance with § 18-304(2)(b).

(f) When floodproofing is utilized, the administrator or his designee shall obtain certification from a registered professional engineer or architect, in accordance with § 18-304(2)(b).

(g) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the administrator or his designee shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this ordinance.

(h) When base flood elevation data or floodway data have not been provided by the Federal Emergency Management Agency then the administrator or his designee shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, including data developed as a result of these regulations, as criteria for requiring that new construction, substantial improvements, or other development in Zone A, on the community FIRM, meet the requirements of this ordinance.
Within unnumbered A Zones, where base flood elevations have not been established and where alternative data is not available, the administrator or his designee shall require the lowest floor of a building to be elevated or floodproofed to a level of at least three feet (3') above the highest adjacent grade (lowest floor and highest adjacent grade being defined in § 18-302 of this ordinance). All applicable data including elevations or floodproofing certifications shall be recorded as set forth in § 18-304(2)(b).

(i) All records pertaining to the provisions of this ordinance shall be maintained in the office of the administrator or his designee and shall be open for public inspection. Permits issued under the provisions of this ordinance shall be maintained in a separate file or marked for expedited retrieval within combined files. (as added by Ord. #08-10, Oct. 2008)

18-305. Provisions for flood hazard reduction. (1) General standards. In all flood prone areas the following provisions are required:

(a) Any structure placed in the floodplain shall be anchored firmly to prevent floodwaters from carrying it downstream. Such anchoring shall be sufficient to withstand velocities of up to six feet (6') per second up to and including the 100-year floodplain in a manner which ensures that debris is not caught. A written opinion from a registered professional engineer shall be submitted that states the proposed structural design meets these standards.

(b) Manufactured homes shall be elevated and anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;

(c) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

(d) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

(e) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

(f) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(g) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
(h) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;

(i) Any alteration, repair, reconstruction or improvements to a building which is in compliance with the provisions of this ordinance, shall meet the requirements of "new construction" as contained in this chapter; and,

(j) Any alteration, repair, reconstruction or improvements to a building which is not in compliance with the provision of this ordinance, shall be undertaken only if said non-conformity is further extended or replaced.

(k) Permitted uses and improvements. All floodplains shall be preserved as permanently protected open space. No uses or improvements other than those listed below shall be permitted in any floodway fringe if in accordance with zoning.

(i) Farm uses that involve crops, orchards, raising of dairy cattle, horses, poultry or other livestock. No structures appurtenant to such activities are allowed.

(ii) The raising of tree and plant stock for clear cutting or nursery uses. No structures appurtenant to such activities are allowed.

(iii) Public areas for active recreational activities including, but not limited to, jogging, cycling, tot lots, playfields, playgrounds, outdoor swimming pools, outdoor tennis courts and golf courses. Public areas for passive recreational activities including, but not limited to, parks, areas for hiking, arboretums, nature areas, wildlife sanctuaries, picnic areas, garden plots, cemeteries and beaches. Structures appurtenant to such activities may be considered by the planning commission and shall meet all requirements of this section.

(iv) Private parks and other open spaces such as youth recreation camps. No structures appurtenant to such activities are allowed.

(v) Picnic shelters and stormwater detention facilities provided that: a certified engineer has certified that such structures are designed to withstand the forces exerted by a 100-year flood; the facility does not increase the 100-year floodway profile by more than one percent (1%); the 100-year floodway profile is not increased on adjacent or upstream properties; and the facility does not increase the height of more frequent floods on adjacent or upstream properties.

(vi) Bridges and approach fills provided that: the facility does not increase the 100-year floodway profile by more than one percent (1%); the 100-year floodway profile is not increased on
adjacent or upstream properties; the facility does not increase the height of more frequent floods on adjacent or upstream properties; and in no case shall the lowest roadway elevation of a bridge or approach be below the 50-year flood. Construction of bridges and approaches shall be designed so that no more than one foot (1') of overtopping of the approaches or structures shall occur during the 100-year storm.

(vii) Private bridges and driveways serving a single family provided that: the facility does not increase the 100-year floodway profile by more than one percent (1%); the 100-year floodway profile is not increased on adjacent or upstream properties; and the facility does not increase the height of more frequent floods on adjacent or upstream properties.

(viii) For lots of record existing prior to April 1, 1981, the effective date of the Federal Emergency Management Agency FIRM maps, the mayor or his designee is authorized to allow uses and filling provided that the following conditions are met in addition to the requirements of other applicable sections of this ordinance.

(A) The mayor or his designee must find that there is no other appropriate building site outside the floodplain on the lot of record.

(B) The filling of the floodplain must be shown on a plan prepared by a licensed professional engineer who has proven experience in hydrologic calculations. The plan must show existing and proposed structures and include a certification that proposed activities will not increase flood heights of the one through 100-year flood on adjacent or upstream properties. This plan must be approved by the mayor or his designee.

(C) The first habitable floor must be elevated to the level of three feet (3') above base flood or flood-proofed to a level of three feet (3') above the base flood.

(D) Only permitted residential uses are allowed under this provision.

Filling may be performed after approval by the mayor or his designee and the issuance of a building permit and/or grading permit, which outlines the conditions of approval. Building construction may begin only after the developer's engineer certifies compliance with the approved grading plan.

The planning commission shall review requests in the placement of any use not specified above. No use that, in the opinion of the planning commission, would be damaged by
floodwaters and no use that would cause additional flooding shall be permitted.

(l) Change of use for structure in floodplain. A change of use is permitted provided that the following criteria are met:

(i) First floor elevation is above the 100-year flood elevation.
(ii) Structure is out of the 100-year flood frequency area and the floodway.
(iii) Proposed use is deemed appropriate by the planning commission.

If the first floor elevation is not above the 100-year flood elevation, the planning commission may impose additional conditions upon the approval.

(m) Nonconforming uses and structures in floodplain. The following regulations shall apply to nonconforming uses and structures existing in the floodplain at the time of adoption of this ordinance.

(i) Expansion or reconstruction. If a nonconforming use or structure lies in a floodplain, the expansion or reconstruction of a nonconforming structure shall only be permitted in the floodway fringe, as defined by this ordinance, and only if the first floor elevation is above the floodplain elevation. To perform such expansion or reconstruction, a plan prepared by a licensed professional engineer that certifies that the construction as proposed will not increase flooding in other areas, and that no rise will result in the base flood elevation. Said plan must be reviewed and approved by the mayor or his designee before a building permit is issued.

(ii) Destruction. A structure that is in the identifiable floodplain and is destroyed, whose first floor elevation is above the floodplain elevation, is not considered in the floodplain and must only present data indication the first floor elevation would indeed be above the base flood elevation. Such data must be in the form of a survey completed by a licensed surveyor and presented to the codes enforcement officer and mayor or his designee for approval to build back on the same foundation.

(n) Installation of fill materials. Fill shall not be permitted for the purposes of future subdivision of land for development of property currently encumbered by the floodplain. Fill may be placed on existing lots within the floodplain as specified in § 18-305(1)(k)(viii) for single-family residential uses. Fill for uses other than single-family residential shall be reviewed by the planning commission and shall meet the following criteria:

(i) Detailed plans prepared by a registered and licensed professional engineer shall be submitted that show existing and
proposed conditions. If a structure is to be placed on the fill, the plans shall show the structure as well. These plans shall be reviewed by the mayor or his designee to assure that the proposed construction will not increase flooding in other areas.

(ii) Compensatory floodwater storage shall be provided to offset the storage lost through filling. Such storage shall be designed to allow positive drainage at all times, and well contoured to be in character with the existing floodplain.

(iii) All changes in velocity, depth of flood elevation and storage shall be limited to the property of the owner doing the filling or those property owners who have been granted flood or flow easements. In no event shall an increase in velocity, depth of flood elevation or loss storage be permitted if it would affect any existing building or bring any building to within three feet (3') of the flood elevation.

(iv) All fill material construction shall be monitored by a geotechnical engineering firm with experience in this field. Reports shall be sealed by a Tennessee registered professional engineer (geotechnical). Reports and information shall be provided to the mayor or his designee and the town hall. Information and monitoring shall be satisfactory to the town. These reports and activities shall be at the developer's cost. As determined necessary by the town, the town may contract with an engineering firm to observe and monitor fill construction and charge the developer for these costs.

(v) All fill areas subject to velocities greater than six feet (6') per second shall be stabilized with properly designed rip rap which will protect against erosion hazards, undercutting or undermining.

(vi) Comply with § 18-305(1)(o) floodways, § 18-305(1)(p) floodway fringe alterations and § 18-305(1)(q) buffers.

(o) Floodways. Areas designated as floodways are located within areas of special flood hazard. The floodway is an extremely hazardous area because of the velocity of floodwaters, which can carry debris and potential projectiles and have erosion potential. Floodways are also used as a base in determining the width of the required stream buffer as described in § 18-305(1)(q). No alterations of the floodway will be allowed.

The open space uses listed below shall be permitted within the floodway to the extent that they are not prohibited in a particular area by any base zoning ordinance and all applicable flood hazard reduction provisions of this zoning ordinance are met.

(i) Agricultural uses such as general farming, pasture, truck farming, forestry, sod farming and wide crop harvesting.
Public and private recreational uses not requiring permanent or temporary structures designed for human habitation, some examples are parks, greenways, swimming areas, golf courses, driving ranges, picnic grounds, wildlife and nature preserves, game and skeet ranges, and hunting, fishing and hiking areas. Temporary structures placed on a site for less than one hundred eighty (180) consecutive days are not considered improved property.

Utility facilities such as flowage area transmission lines, pipelines, water monitoring devices, roadways and bridges.

Floodway fringe alterations. All floodway fringe alterations that result in the filling or elimination of floodplain storage shall provide compensating storage capacity by dredging out at least an equal amount of volume as occupied by fill. All dredged or cut materials shall be removed from the site before fill materials can be delivered, unless all fill materials is generated on-site. Dredging or cut volumes below the elevations of the two (2) year storm event shall not be included in the compensating storage capacity calculation. Every effort shall be made to preserve natural flow lines and to avoid situations that encourage sediment deposition in slack water areas.

All dredged or cut areas shall be stabilized immediately to prevent erosion. Areas to be filled must be cleared of standing trees, stumps, brush, down timber, and all objects including structures on and above the ground surface. Topsoil shall be removed and stockpiled, while other spoil materials must be disposed of off-site. Fill materials shall be placed in compacted layers and the minimum distance from the perimeter of any proposed building to top of slope shall be either twenty-five feet (25') or twice the depth of fill at that point, whichever is greater. The fill material must not have slopes steeper that 3H:1V unless stabilization measures approved by the mayor or his designee are installed. All slopes shall be stabilized.

No alterations can be made to the floodway fringe land and stormwater management channels without the written approval of the mayor or his designee. All applicable requirements of this ordinance as well as the following specific conditions must be met before such approval will be granted.

The construction of a levee, earth fill, building or other structure that alters a floodway fringe area shall only be permitted based on a plan prepared by a registered engineer, showing existing and proposed elevations, existing and proposed stormwater management channels and existing and proposed structures. The plan shall be approved by the mayor or his designee certifying that the alteration and construction as
proposed are in compliance with all applicable flood hazard reduction provisions of these guidelines.

(ii) The proposed excavation, filling or change of alignment of any existing channel under the jurisdiction of the U.S. Army Corps of Engineers shall be approved by same.

The plan shall be approved by the Nolensville Planning Commission. Any duly approved alteration of the floodplain will be so noted on the official zoning map as a matter of public information. This notation will be made upon such certification by the mayor or his designee to the planning commission that such alteration has been completed in accordance with the approved plan.

(q) Buffers. New development and significant re-development in or adjacent to the floodplain and floodway shall include buffers in the proposed plans. The buffer along waterways will be an area where the surface is left in a natural state and is not disturbed by construction activity.

The buffer shall be defined as follows;

(i) In areas where a floodplain and a floodway have been determined and accepted by the town, the buffer shall be the width of the floodway plus at least fifty feet (50') perpendicular from the floodway on each side of the waterway.

(ii) In areas where the floodplain and floodway have not been determined and accepted by the town, and it contains a "blue line" or intermittent "blue line" stream denoted on the United Stated Geological Survey Quadrangle maps or service a significant tributary area, of forty (40) or more acres, the buffer shall be at least twenty-five feet (25') perpendicular from each side of the stream bank, creek, or unnamed water under "bank full" conditions.

(iii) In areas where the floodplain and floodway have not been determined and accepted by the town, of the Federal Emergency Management Agency and does not contain a "blue line" or intermittent "blue line" stream denoted on the United Stated Geological Survey Quadrangle maps or service a significant tributary area, of forty (40) or more acres, a buffer is not required. The following additional performance criteria shall apply:

(i) In order to maintain the functional value of the buffer area, indigenous vegetation may be removed and minor grading performed only to provide for reasonable sight lines, stormwater conveyance to provide adequate drainage, access paths, general woodlot management, and stormwater quality Best Management Practices (BMPs) as follows:

(A) Tree pruning or removal be minimized, but permitted as necessary to provide for sight lines, and vistas,
provided that when removed they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering non-point source pollution from runoff.

(B) Any path, for public or private uses, shall be constructed and surfaced so as to effectively control erosion and minimize increase in excess stormwater runoff volume and velocity.

(C) Dead, diseased or dying trees or shrubbery may be removed at the discretion of the landowner.

(ii) When the application of the buffer area would result in extreme loss of buildable areas, as defined by a fifty percent (50%) or greater loss on a lot of parcel, modifications to the width of the buffer may be allowed through the current appeals process, through the town storm water appeals board.

(2) Specific standards. These provisions shall apply to all areas of special flood hazard as provided herein:

(a) Residential construction. Where base flood elevation data is available, new construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement elevated no lower than three feet (3') above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate equalization of forces on both sides of exterior walls and to ensure unimpeded movements of flood waters shall be provided in accordance with standards of, § 18-305(2)(c).

Within unnumbered A Zones, where base flood elevations have not been established and where alternative data is not available, the administrator shall require the lowest floor of a building to be elevated of floodproofed to a level of at least three feet (3') above the highest adjacent grade (lowest floor and highest adjacent grade being defined in § 18-302 of this ordinance). Applicable data including elevations or floodproofing certifications shall be recorded as set forth in § 18-304(2)(b).

(b) Nonresidential construction. New construction or substantial improvement of any commercial, industrial, or nonresidential building, when BFE data is available, shall have the lowest floor, including basement, elevated no lower than three feet (3') above the level of the base flood elevation.

Within unnumbered A Zones, where base flood elevations have not been established and where alternative data is not available, the administrator shall require the lowest floor of a building to be elevated or floodproofed to a level off at least three feet (3') above the highest adjacent grade (lowest floor and highest adjacent grade being defined in § 18-302 of this ordinance). All applicable data including elevations or floodproofing certifications shall be recorded as set forth in § 18-304(2)(b).
Buildings located in all A-Zones, may be floodproofed in lieu of being elevated provided that all areas of the building below the required elevation are watertight with walls substantially impermeable to the passage of water, and are built with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the Administrator or his designee as set forth in § 18-304(2)(b).

(c) Elevated building. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls.

(i) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria.

(A) Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;

(B) The bottom of all openings shall be no higher than one foot (1') above grade; and

(C) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

(ii) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

(iii) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms in such a way as to impede the movement of floodwaters and all such petitions shall comply with the provisions of § 18-304(2)(b) of this chapter.

(d) Standards for manufactured homes and recreational vehicles. (i) All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions of existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or subdivisions, must meet all the requirements of new construction, including elevations and anchoring.
(ii) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

(A) The lowest floor of the manufactured home is elevated no lower than three feet (3') above the level of the base flood elevation on a permanent foundation;

(B) The manufactured home must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement; and,

(C) Any manufactured home, which has incurred "substantial damage" as the result of a flood or that has substantially improved, must meet the standards of § 18-305(2).

(iii) All recreational vehicles placed on identified flood hazard sites must either:

(A) Be on the site for fewer than one hundred eighty (180) consecutive days;

(B) Be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached structures or additions.

(C) The recreational vehicle must meet all the requirements for new construction, including anchoring and elevation requirements of this section above if on the site for longer than one hundred eighty (180) consecutive days.

In all areas of special flood hazard where base flood elevation data or floodway data have not been provided, the provisions of § 18-304(3)(h) shall be utilized for all requirements relative to the base flood elevation or floodways.

(3) Standards for areas of special flood hazard Zones AE, with established base flood elevation, but without floodways designated. Located within the areas of special flood hazard established in § 18-303(2), where streams exist with base flood data provided but where no floodways have been provided, (Zones AE) the following provisions apply:

(a) No encroachments, including fill material, new structures or substantial improvements shall be located within areas of special flood hazard, unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot (1') at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.
New construction or substantial improvements of buildings shall be elevated to elevations established in accordance with § 18-305(2).

(4) Standards for streams without established base flood elevations or floodways (A Zones). Located within the areas of special flood hazard established in § 18-303, where streams exist, but no base flood data has been provided (A Zones), or where a floodway has not been delineated, the following provisions shall apply:

(a) When base flood elevation data of floodway data have not been provided in accordance with § 18-303, then the administrator shall obtain, review and reasonably utilize any scientific or historic base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of § 18-305. Only if data is not available from these sources, then the following provisions ((b) & (c)) shall apply:

(b) No encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty feet (20'), whichever is greater; measured from the top of the stream bank, unless certification by registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot (1') at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

(c) In special flood hazard areas without base flood elevation data, new construction or substantial improvements of existing buildings shall have the lowest floor of the enclosed area (including basement) elevated no less than three feet (3') above the highest adjacent grade at the building site. Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the standards of § 18-305(2) and "elevated buildings."

(5) Standards for areas of shallow flooding (AO and AH Zones). Located within the areas of special flood hazard established in § 18-303, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet (1' - 3') where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

(a) All new construction and substantial improvements of residential buildings shall have the lowest floor, including basement, elevated to at least one foot (1') above the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated, at least three feet (3') above the highest adjacent grade.
Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of § 18-305(2) and "elevated buildings."

(b) All new construction and substantial improvements of nonresidential buildings may be floodproofed in lieu of elevation. The structure together with attendant utility and sanitary facilities must be floodproofed and designed watertight to completely floodproofed to at least one foot (1') above the specified FIRM flood level, with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. If no depth number is specified, the lowest floor, including basement, shall be floodproofed to at least three feet (3') above the highest grade. A registered professional engineer or architect with accepted standards of practice for meeting the provisions of this ordinance and shall provide such certification to the administrator as set forth above and as required in § 18-305(2).

(c) Adequate drainage paths shall be provided around slopes to guide floodwaters around and away from proposed structures.

(d) The administrator shall certify the elevation or the highest adjacent grade, where applicable, and the record shall become a permanent part of the permit file.

(6) Standards for areas protected by flood protection system (A-99 Zones). Located within the areas of special flood hazard established in § 18-303, are areas of the 100-year flood protected by a flood protection system, but where base flood elevations and flood hazard factors have not been determined. With these areas (A-99 Zones), the following provisions apply:

(a) All provisions of §§ 18-304 and 18-305 shall apply.

(7) Standards for areas of special flood hazard with established base flood elevation and with floodways designated. Located within the areas of special flood hazard established in § 18-303(2) are areas designated as floodways. A floodway may be extremely hazardous area due to velocity of floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights and velocities. Therefore, the following provisions shall apply:

(a) No encroachments, including fill material, new construction, substantial improvements or other developments shall be located within designated floodways, unless hydrologic and hydraulic analyses performed in accordance with standard engineering practices and certified by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed encroachments or new development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base
flood during the occurrence of the base flood discharge at any point within
the community.

(b) If § 18-305(7)(a), above is satisfied, new construction or
substantial improvements of buildings shall comply with all applicable
flood hazard reduction provisions of § 18-305.

(8) Standards for unmapped streams. Located within Nolensville,
Tennessee, are unmapped streams where areas of special flood hazard are
neither indicated nor identified. Adjacent to such streams the following
provisions shall apply:

(a) In areas adjacent to such unmapped streams, no
encroachments including fill material or structures shall be located
within an area of at least equal to twice the width of the stream along
each side of the stream, and not within the required buffer area as called
out in the Nolensville Stormwater Ordinance.

(b) When flood elevation data is available, new construction or
substantial improvements of buildings shall be elevated or floodproofed
to elevations established in accordance with § 18-304(2).

(9) Standards for subdivision. Subdivision and other proposed new
developments, including manufactured home parks, shall be reviewed to
determine whether such proposals will be reasonably safe from flooding. If a
subdivision proposal or other proposed new development is in a flood prone area,
any such proposals shall be reviewed to ensure that:

(a) All subdivision proposals shall be consistent with the need
to minimize flood damage.

(b) All subdivision proposals shall have public utilities and
facilities such as sewer, gas, electrical and water systems located and
constructed to minimize or eliminate flood damage.

(c) All subdivision proposals shall have adequate drainage
provided to reduce exposure to flood hazards.

(d) Base flood elevation data shall be provided for subdivision
proposals and other proposed development (including manufactured home
parks and subdivisions) which is greater than fifty (50) lots and/or five (5)
acres. (as added by Ord. #08-10, Oct. 2008)

18-306. Variance procedures. The provisions of this section shall
apply exclusively to areas of special flood hazard.

(1) Stormwater appeals board. (a) The Nolensville Storm Water
Appeals Board shall hear and decide appeals and requests for variances
from the requirements of this chapter.

(b) Variances may be issued for the repair or rehabilitation of
historic structures (see definition) upon a determination that the
proposed repair or rehabilitation will not preclude the structure's
continued designation as a historic structure and the variance is the
minimum to preserve the historic character and design of the structure.
(c) In passing upon such applications, the storm water appeals board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:

(i) The danger that materials may be swept onto other property to the injury of others;
(ii) The danger to life and property due to flooding or erosion;
(iii) The susceptibility of the proposed facility and its contents to flood damage;
(iv) The importance of the services provided by the proposed facility to the community;
(v) The necessity of the facility to a waterfront location, in the case of a functionally dependent facility;
(vi) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
(vii) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
(viii) The safety of access to the property in times of flood for ordinary and emergency vehicles;
(ix) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site, and;
(x) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(d) Upon consideration of the factors listed above, and the purposes of this ordinance, the storm water appeals board may attach such conditions to the granting of variances as it deems necessary to effectuate the purposes of this ordinance.

(e) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(2) Conditions for variances. (a) Variances shall be issued upon a determination that the variance is the minimum relief necessary, considering the flood hazard; and in the instance of a historical building, a determination that the variance is the minimum relief necessary so as not to destroy the historic character and design of the building.

(b) Variances shall only be issued upon

(i) A showing of good and sufficient cause,
(ii) Determination that failure to grant the variance would result in exceptional hardship; and
(iii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(c) Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance, and that such construction below the base flood level increases risks to life and property.

(d) The mayor or his designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request. (as added by Ord. #08-10, Oct. 2008)
CHAPTER 4

SEWER CONNECTION REQUIREMENTS

SECTION
18-401. Sewer requirements.
18-402. Sewer service charge.

18-401. Sewer requirements. In accordance with Tennessee Code Annotated, § 68-221-209, upon completion of the sewer system as provided in resolution #09-21, any person or persons or entities owning improved parcels contiguous to public rights-of-way and/or public utility easements containing public sanitary sewers shall make connection to the public infrastructure in accordance with metro water and sewer department's current specifications and sewer acceptability policy. This must be accomplished within sixty (60) days of being notified by the Town of Nolensville to do so unless otherwise notified by the director of metro water and sewer department. Any required fees and service charges will be billed on the next billing cycle. This schedule may be shortened if an existing condition is a threat to public health and safety. (as added by Ord. #09-15, Oct. 2009)

18-402. Sewer service charge. Properties having direct access to either a gravity sewer line or to a collector force main will be billed for sewerage service, in accordance with the Metropolitan Code of Laws section 15.40.060, whether or not a connection is made. Therefore, properties having previously been granted an exemption from this charge solely on the basis of not having gravity access will become subject to the charge once access is provided. Exemptions from sewer service charges previously granted for any other reason will not be affected by this provision. (as added by Ord. #09-15, Oct. 2009)