

**PLANNING BOARD**

**STORMWATER MANAGEMENT**  
**AND EROSION CONTROL REGULATIONS**

**1.0 Purpose**

Increased volumes of stormwater, contaminated stormwater runoff from impervious surfaces, and soil erosion and sedimentation are major causes of:

1. impairment of water quality and decreased flow in lakes, ponds, streams, rivers, wetlands and groundwater;
2. contamination of drinking water supplies;
3. erosion of stream channels;
4. alteration or destruction of aquatic and wildlife habitat;
5. flooding; and,
6. overloading or clogging of municipal catch basins and storm drainage systems.

The United States Environmental Protection Agency has identified sedimentation from land disturbance activities and polluted stormwater runoff from land development and redevelopment as major sources of water pollution, impacting drinking water supplies, natural habitats, and recreational resources. Regulation of activities that result in the disturbance of land and the creation of stormwater runoff is necessary for the protection of the Town of Tewksbury water bodies and groundwater resources, to safeguard the health, safety, and welfare of the general public and protect the natural resources of the Town. These regulations address the issues mentioned above and as referenced in the Stormwater Management and Erosion Control Bylaw of the Town of Tewksbury.

**2.0 Authority**

- 2.1** The Regulations contained herein have been adopted by the Planning Board in accordance with the Town of Tewksbury Stormwater Management and Erosion Control Bylaw. (Chapter 19 of Town Code)
- 2.2** Nothing in these Regulations is intended to replace or be in derogation of the requirements of the Town of Tewksbury Wetlands Protection Bylaw or any Rules and Regulations adopted thereunder unless these regulations are more stringent.
- 2.3** These Stormwater Regulations may be periodically amended by the Planning Board in accordance with the procedures outlined in Section 19.050 (C) of the Town of Tewksbury Stormwater Management and Erosion Control Bylaw.

### **3.0 Administration**

The Planning Board shall administer, implement and enforce these Regulations. Projects and activities approved by the Planning Board shall be deemed in compliance with the intent and provisions of these Stormwater Management and Erosion Control Regulations.

### **4.0 Procedures**

**4.1** Major Land Disturbance Permit issuance is required prior to any activity disturbing 40,000 square feet or more of land or as listed in Section 19.041 (B) of the Stormwater and Erosion Control Bylaw except for Section 19.041 (A), which requires a Minor Land Disturbance Permit. In either case the site owner or his Agent shall file for the permit with the Planning Board. While application may be made by a representative, the permittee must be the owner of the site.

**4.2 Applications:** An application shall be made to the Planning Board in a form and containing information as specified in the Regulations adopted by the Planning Board respectively and shall be accompanied by payment of the appropriate application and review fees. The fee shall be collected by the Planning Board prior to any review. Applicants shall submit an additional complete application to the Board and/or Commission which is currently reviewing other permits for the same project.

1. Major Land Disturbance Permit Application package shall include:
  - a. a completed Application Form with original signatures of all owners;
  - b. a list of abutters, certified by the Assessors Office;
  - c. three (3) copies of the Erosion and Sediment Control Plan as specified in Section 4.6 of these regulations;
  - d. three (3) copies of the Stormwater Management Plan as specified in Section 4.7 of these regulations;
  - e. three (3) copies of the Operation and Maintenance Plan as specified in Section 5.0 of these regulations,
  - f. payment of the application and review fees; and,
2. One (1) copy each of the Application Form, the Stormwater Management Plan, the Operation & Maintenance Plan and the list of abutters must be filed with the Town Clerk for all Land Disturbance Permits. The Major Land Disturbance Permit Application Package will also be submitted to any other Boards or Commissions reviewing the project.
3. **Minor Land Disturbance Permit Application is required for** land disturbance where there is a 15% slope or greater and where the land disturbance is greater than or equal to 200 square feet within the sloped area. An application for a Minor Land Disturbance Permit will include, at a minimum, a sketch of the parcel or parcels on which the activity is to take place, drawn so as to include soil erosion and sediment control practices, planned and existing roadways, waterways,

building or buildings to be constructed, topography, a stabilization construction entrance, a Minor Land Disturbance Permit Application and any other information requested by the Planning Board or their Agent. The plot plan will be drawn to scale. The above information will be submitted to the Town Clerk as well as the Planning Board. Minor Land Disturbance Permits have all of the same requirements as the Major Land Disturbance Permits except for the submittal requirements stated above or where stated in the regulations.

**4.3 Information Requests:** The Planning Board may request such additional information as is necessary to enable the Planning Board to determine whether the proposed land disturbance activity will protect water resources and meet the objectives of the Stormwater Management and Erosion Control Bylaw and Regulations.

**4.4 Determination of Completeness.** The Planning Board shall make a determination as to the completeness of the application and adequacy of the materials submitted within 5 business days. No review shall take place until the application has been found to be complete.

**4.5 Project Changes.** The permittee, or their Agent, must notify the Agent of the Planning Board in writing of any change or alteration of a land-disturbing activity before the change or alteration occurs. If the Agent of the Planning Board determines that the change or alteration is significant, based on the design requirements listed in Section 4.6 and Section 4.7 of the Regulations the Agent of the Planning Board may require that an amended application or a full application be filed in accordance with this Section. If any change or alteration from the Land Disturbance Permit occurs during land disturbing activities, including significant changes in schedule, the Agent of the Planning Board may require the installation of interim erosion and sedimentation control measures before considering the change or alteration.

**4.6 Erosion and Sediment Control Plan.** The Erosion and Sediment Control Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sedimentation controls. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design standards and contain the information listed below.

**a. Standards.** The Erosion and Sediment Control Plan shall be designed to meet the Massachusetts Stormwater Management Policy.

**b. Contents.**

The Erosion and Sediment Control Plan shall contain the following information:

1. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan.
2. Title, date, north arrow, names of abutters, scale (1"=20' or 1"=40'), legend, and locus map (1"=800').

3. Location and description of natural features including:
  - a. Watercourses and water bodies, wetland resource areas, riparian zones and all floodplain information, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a professional engineer for areas not assessed on these maps;
  - b. Existing vegetation of various kinds including tree lines, shrub layer, ground cover and herbaceous vegetation, and trees with a caliper twelve (12) inches or larger, noting specimen trees and forest communities;
  - c. Habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, Potential Vernal Pools, and Priority Habitats of Rare Species within five hundred (500) feet of any construction activity.
  - d. Lines of existing abutting streets showing drainage and driveway locations and curb cuts.
  - e. Existing soils (type, hydrologic group, erodibility) and the volume and nature of imported soil materials.
  - f. Topographical features including existing and proposed contours at intervals no greater than two (2) feet with spot elevations provided when needed.
  - g. Steep slopes for pre-development and post-development conditions, delineated by 0%-15%, 15%-25%, and over 25%.
  - h. Surveyed property lines showing distances and monument locations, all existing and proposed easements, rights-of-way, and other encumbrances, the size of the entire parcel, and the delineation and number of square feet of the land area to be disturbed.
  - i. Drainage patterns, watersheds and subwatersheds, with calculations of proposed land disturbance within each subwatershed and areas of soil to be disturbed in each watershed throughout the duration of the proposed land disturbance activity.
  - j. Location and details of erosion and sediment control measures with a narrative of the construction sequence/phasing of the project, including both operation and maintenance for structural and non-structural measures, interim grading, and material stockpiling areas.
  - k. Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable.
  - l. Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other temporary and final stabilization measures.
  - m. A description of construction and waste materials expected to be stored on-site. The Plan shall include a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.

- n. A description of provisions for phasing the project where 40,000 square feet of contiguous area or greater is to be altered or disturbed.
- o. Plans, reports, and calculations must be stamped and certified by a qualified professional as defined in Section 19.020 of the Stormwater Management and Erosion Control Bylaw.
- p. Such other information as is required by the Planning Board.

**4.7 Stormwater Management Plan.** The Stormwater Management Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed best management practices for the permanent management and treatment of stormwater. The Stormwater Management Plan shall contain sufficient information for the Planning Board to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The Plan shall be designed to meet the Massachusetts Stormwater Management Policy. The Stormwater Management Plan shall fully describe the project in drawings, and narrative. The applicant shall submit such material as is required below.

**a. Standards.** The Stormwater Management Plan shall be prepared in accordance Massachusetts Stormwater Management Policy.

**b. Stormwater Management Plan Contents.** The Stormwater Management Plan shall contain the following information:

1. A locus map, at a scale of 1"=800'.
2. The existing zoning, and land use at the site.
3. The proposed land use.
4. The location(s) of existing and proposed easements.
5. The location of existing and proposed utilities.
6. The site's existing & proposed topography with contours at 2 foot intervals.
7. The existing site hydrology.
8. A description & delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows.
9. A delineation of 100-year flood plains, if applicable.
10. An estimate made by a Licensed Soil Evaluator of seasonal high groundwater elevation in each area to be used for stormwater retention, detention, or infiltration.
11. The existing and proposed vegetation and ground surfaces with runoff coefficient for each.
12. A drainage area map showing pre and post construction watershed boundaries, drainage area and stormwater flow paths.
13. A description and drawings of all components of the proposed drainage system including:

- a. locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization,
  - b. all measures for the detention, retention or infiltration of water,
  - c. all measures for the protection of water quality,
  - d. the structural details for all components of the proposed drainage systems and stormwater management facilities,
  - e. notes on drawings specifying materials to be used, construction specifications, and typicals, and
  - f. expected hydrology with supporting calculations.
14. The proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable.
  15. The Timing, schedules, and sequence of development including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization.
  16. A maintenance schedule for the period of construction.
  17. Any other information requested by the Planning Board.

## **5.0 Operation and Maintenance Plan**

**5.1** An **Operation and Maintenance Plan (O&M Plan)** for the permanent storm water management system is required at the time of application for all projects. The maintenance plan shall be designed to ensure compliance with this Bylaw and that the Massachusetts Surface Water Quality Standards contained in 314 CMR 4.00 are met in all seasons and throughout the life of the system. The Planning Board shall make the final decision of what maintenance option is appropriate in a given situation. The Planning Board will consider natural features, proximity of site to water bodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision. Once approved by the Planning Board the Operation and Maintenance Plan shall be recorded at the Middlesex North Registry of Deeds by the permittee, shall remain on file with the Planning Board and shall be an ongoing requirement. The Operation and Maintenance Plan shall conform to the requirements listed below. Stormwater management easements shall be provided by the property owner(s) and shall be sufficient in location and extent to carry out the required maintenance.

**5.2 **Operation and Maintenance Plan Requirements.**** An Operation and Maintenance Plan shall include:

1. The name(s) of the owner(s) for all components of the system
2. Maintenance agreements that specify:
  - a. The names and addresses of the person(s) responsible for operation and maintenance
  - b. The person(s) responsible for financing maintenance and emergency repairs.
  - c. A Maintenance Schedule for all drainage structures, including swales and ponds.

- d. A list of easements with the purpose and location of each.
- e. The signature(s) of the owner(s).

### **5.3 Stormwater Management Easement(s).**

1. Stormwater management easements shall be provided by the property owner(s) as areas are necessary for:
  - a. access for facility inspections and maintenance,
  - b. preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event; and
  - c. direct maintenance access by heavy equipment to structures requiring regular cleanout maintenance.
2. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
3. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Planning Board.
4. Easements shall be recorded with the Middlesex North Registry of Deeds prior to issuance of a Certificate of Completion by the Planning Board.

### **5.4 Changes to Operation and Maintenance Plans**

1. The owner(s) of the stormwater management system must notify the Planning Board or its Agent of changes in ownership or assignment of financial responsibility.
2. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this Stormwater Management and Erosion Control Bylaw and Regulations by mutual agreement of the Planning Board and the Responsible Parties. Amendments must be in writing and signed by all Responsible Parties. Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility. Once the amended Plan is signed the Planning Board shall file it at the Registry of Deeds at the expense of the current owner(s).

### **5.5 Annual Report Submittal**

The Responsible Parties must submit annual reports regarding the inspection and maintenance of the BMPs for which they are responsible. The reports must include:

1. Descriptions of the condition of the BMPs,
2. Descriptions of maintenance performed and,
3. Receipts for maintenance performed.

### **6.0 Preconstruction Meeting.**

Prior to clearing, excavation, construction, or any land disturbing activity requiring a permit, the applicant, the applicant's technical representative, the general contractor, pertinent subcontractors, and any person with authority to make changes to the project,

shall meet with the Planning Board or its designated Agent to review the permitted plans and proposed implementation.

## **7.0 Inspections**

**7.1 Inspection and Site Supervision-** All inspections will be conducted by an Agent of the Planning Board.

**7.2 Planning Board Inspection.** - The Planning Board or its designated Agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the approved plans and any conditions of approval. One copy of the permit plans and conditions of approval signed by the Planning Board shall be maintained at the site during the progress of the work. A copy of the NPDES Construction General Permit and Stormwater Pollution Prevention Plan (if applicable) shall be kept on site as well. In order to obtain inspections, the permittee shall notify the Agent of the Planning Board at least three (3) working days before each of the following events:

1. Erosion and sediment control measures are in place and stabilized;
2. Rough Grading has been substantially completed;
3. Final Grading has been substantially completed;
4. Bury Inspection: prior to backfilling of any underground drainage or stormwater conveyance structures.
5. Close of the Construction Season; and
6. Final Landscaping (permanent stabilization) and project final completion.

**7.3 Final Inspection.** After the stormwater management system has been constructed and before the surety has been released, the applicant must submit a record plan detailing the actual stormwater management system as installed. The applicant must submit an explanation detailing any differences between the plans approved with the permit and the as-built plans. This explanation must be stamped by a Professional Engineer. The Planning Board or its Agent shall inspect the system to confirm its "as-built" features. This inspector shall also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate he shall so report to the Planning Board which will issue a Certificate of Completion.

If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Stormwater Management Plan, it shall be corrected by the permittee before the performance guarantee is released. If the permittee fails to act the Town of Tewksbury may use the surety bond to complete the work. Examples of inadequacy shall be limited to: errors in the infiltrative capability, errors in the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins.

**7.4 Permittee Inspections.** The permittee or his/her Agent shall conduct and document inspections of all control measures no less than weekly or as specified in the permit, and prior to and following anticipated storm events. The purpose of such inspections will be to determine the overall effectiveness of the Erosion and Sedimentation Control Plan, and the need for maintenance or additional control measures. The permittee or his/her Agent shall submit monthly reports to the Planning Board or designated Agent in a format approved by the Planning Board. The Planning Board may require, as a condition of approval, that an Environmental Site Monitor, approved by the Planning Board, be retained by the applicant to conduct such inspections and prepare and submit such reports to the Planning Board or its designated Agent.

**7.5 Access Permission.** To the extent permitted by state law, and as authorized by the owner at the time of the application or other party in control of the property, the Planning Board, its Agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under this Bylaw and may make or cause to be made such examinations, surveys or sampling as the Planning Board deems reasonably necessary to determine compliance with the permit.

#### **8.0 Final Reports**

Upon completion of the work, the permittee shall submit a report (including certified as-built construction plans) from a Professional Engineer (P.E.), surveyor, certifying that all erosion and sediment control devices, and approved changes and modifications, have been completed in accordance with the conditions of the approved permit. Any discrepancies should be noted in the cover letter. Minor Land Disturbance Permits are not required to have a P.E. or surveyor certify as built plans.

#### **9.0 Certificate of Completion**

The Planning Board will issue a letter certifying completion upon receipt and approval of the final reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this Bylaw. The Certificate of Completion shall be recorded at the Registry of Deeds by the Owner(s).

## Application Land Disturbance Permit

### GENERAL INSTRUCTIONS

An applicant for a land disturbance plan review must file with the Planning Board a completed application package, in accordance with the requirements of the Stormwater Management and Erosion Control Bylaw and Regulations. Timelines concerning the review process will not begin until the Planning Board has determined that the application is complete and decisions from other Boards and Commissions have been concluded.

1. Any application not accompanied by the appropriate fee shall be deemed incomplete. Payment must be made to the Town of Tewksbury in cash, money order, bank or certified check payable to the Town of Tewksbury.
2. An Applicant's failure to pay any additional review or inspection fee within five business days of receipt of the notice that further fees are required shall be grounds for disapproval.
3. The Applicant will publish the public notice. The applicant is responsible for sending abutter notification, by certified mail-return receipt requested. Copies of the certified mail receipts must be submitted to the Planning Board for verification prior to the Public Review. The applicant shall pay all costs associated with the publication and notification requirements.

Professional review fees include engineering review, legal review, and clerical fees associated with the public review and permit processing. A fee estimate may be provided by the Planning Board's consultant. The applicant may be required to establish an escrow account with the Town to cover the review fees. If the escrow account becomes depleted, the applicant will be required to renew the escrow account in order to continue the review of the application.

Applicant's Name \_\_\_\_\_  
 Applicant's Address \_\_\_\_\_  
 \_\_\_\_\_  
 Applicant's Phone \_\_\_\_\_  
 \_\_\_\_\_  
 Owners' Names(s) \_\_\_\_\_  
 Owners' Address \_\_\_\_\_  
 \_\_\_\_\_  
 Owner's Phone \_\_\_\_\_  
 \_\_\_\_\_

The Land Disturbance involves property where owner's title to the land is derived under deed from \_\_\_\_\_, dated \_\_\_\_\_, and recorded in the Middlesex North Registry of Deeds, Book \_\_\_\_\_, Page \_\_\_\_\_, or Land Court Certificate of Title No \_\_\_\_\_, Registered in \_\_\_\_\_ District, Book \_\_\_\_\_, Page \_\_\_\_\_. The project is located on the parcel shown on Assessors Map \_\_\_\_\_, Parcel \_\_\_\_\_. Project street address \_\_\_\_\_

Give a brief summary of the nature of the project. (attachment is acceptable)

The property (building) is described as being located at \_\_\_\_\_; It is currently used as \_\_\_\_\_,

The changes proposed are

\_\_\_\_\_

Planned start date: \_\_\_\_\_, Planned completion date: \_\_\_\_\_

Total area to be disturbed? \_\_\_\_\_ square feet..

Total area of the site (lot) \_\_\_\_\_ square feet

Will there be disturbance of any slope greater than 15%? \_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, give the area of the slope disturbance. \_\_\_\_\_ square feet.

Please list other narratives and plans (graphics) submitted with this application.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Attach application fee and supporting documents.

**Certification**

I, the undersigned, hereby certify that I have read and understand the requirements and conditions of the Town of Tewksbury Stormwater Management and Erosion Control Bylaw and Regulations and that the information included in the application materials is accurate and truthful to the best of my knowledge. (sign and print name and date)

Owner Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name \_\_\_\_\_  
(please print)

Applicant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_  
(please print)

**Application Fee Schedule**

The following fee schedules are minimum fees. The Planning Board may require higher fees if deemed necessary for proper review of an application or to ensure compliance.

Lot Area	Application Fee
Less Than 3 Acres	\$ 100
3 to 10 Acres	\$ 200
Greater than 10 Acres	\$ 500

Resubmittal/Amendment  
Filing Fee \$ 50

GIS Surcharge \$20