

STILLWATER TOWNSHIP
WASHINGTON COUNTY, MINNESOTA

**AN ORDINANCE CONCERNING STORM WATER MANAGEMENT
AND EROSION CONTROL**

THE BOARD OF SUPERVISORS OF THE TOWN OF STILLWATER ORDAINS:

**ARTICLE I.
PURPOSE AND ADMINISTRATION**

Section 1.0. Findings of Fact. The Board of Supervisors hereby finds that protection of the water and soil resources found within Stillwater Township is necessary for the public good. Uncontrolled and inadequately planned use of natural resources adversely affects the public health, safety, and general welfare by contributing to pollution, erosion, flooding, and other environmental problems, and by creating nuisances, impairing the local tax base, and hindering the ability of the Jurisdiction to provide adequate flood protection. The Board of Supervisors further finds that:

- (a) the public health, safety, and welfare is adversely affected by poor ambient water quality and flooding that results from inadequate management of both the quality and quantity of storm water;
- (b) every parcel of real property, both public and private, either uses or benefits from the maintenance of the storm water conveyance system; and
- (c) current and anticipated growth in the Jurisdiction will contribute to and increase the need for improvement and maintenance of the storm water conveyance system.

Section 2.0. Purpose. Therefore, the purposes of this Ordinance are to provide for:

A. The protection, preservation, property maintenance, and use of the water and soil resources of the Jurisdiction in order to minimize disturbance to them and to prevent damage from erosion.

B. The use of controls and regulations to secure safety from floods; to prevent loss of life, property damage, and other losses and risk associated with flood conditions; to reduce the financial burdens imposed upon the community through rescue and relief efforts occasioned by the occupancy or use of areas subject to periodic flooding; to protect individual and community riparian rights; and to preserve the location, character, and extent of natural and artificial water storage and retention areas.

C. The enforcement of this Ordinance and the coordination of the enforcement of appropriate and applicable local, state, and federal statutes and regulations.

D. Provide consistency in Township Policy in the management of stormwater and erosion, and the preservation of wetland.

Section 3.0. Application.

A. When the requirements imposed by this ordinance are less restrictive than the requirements of other ordinances, statutes, or regulations, the most restrictive shall apply.

B. The requirements in this ordinance are in addition to the requirements in the subdivision and zoning ordinance and other applicable ordinances, statutes, and regulations.

C. The standards set forth in this ordinance apply whether or not a permit is required.

Section 4.0. Definitions. For the purposes of this Ordinance, the following have the meanings given them in this Section:

Administrator means the Board of Supervisors of Stillwater Township or its designees.

Applicant means any person, firm, or corporation who submits an application for a permit pursuant to Section 5.0 of this Article.

Best Management Practices (BMP's) means the Minnesota Pollution Control Agency's, the Minnesota Department of Natural Resources', or the Minnesota Board of Water and Soil Resources' best management practices manuals.

Conveyance System means any path, including but not limited to ditches, streams, overland flow channels, and storm sewer systems, travelled by water as it passes through the watershed.

Developer means any person, firm, or corporation engaging or intending to engage in a "Land Disturbing Activity".

District means the Washington County Soil and Water Conservation District organized and operating under Minnesota Statutes Chapter 40.

Erosion means any process that moves soil along or away from the surface of the land by the action of water, wind, ice, or gravity.

Excessive Erosion occurs when any or all of the following conditions exist: (a) estimated average annual rate of soil erosion for a particular parcel of land resulting from sheet and rill erosion or wind erosion is greater than the soil loss tolerance for

any of the soil series comprising that particular parcel of land, (b) evidence of concentrated, active rill erosion, or (c) evidence of active gully erosion.

Gully Erosion is a process whereby water accumulates in narrow channels and over short periods of time, removes the soil from this narrow area of depth exceeding one (1) foot.

Jurisdiction means Stillwater Township.

Land Disturbing Activities means any change of the land surface including but not limited to removing vegetation cover, excavating, filling, and grading within the Jurisdiction.

Lateral Conveyors means any system that provides drainage for local areas that do not have natural or artificial water storage or retention areas or natural channels. "Lateral Conveyors" outlet into natural or artificial water storage or retention areas or outlet directly into "Outflow Conveyors".

Natural and Artificial Water Storage and Retention Areas means any natural or artificial lake, pond, surface water storage area, or wetland that has the potential to temporarily retain surface water runoff for the purpose of runoff water management or water quality management.

Off-site Impacts means any observable detrimental effect, damage, or result to adjoining lands, bodies of water, watercourses, or wetlands or the atmosphere due to excessive erosion and sedimentation.

Outflow Conveyors means any system, including but not limited to streams and other natural channels, that forms the outlet for a natural or artificial water storage or retention area of any landlocked depression where the accumulated runoff from extreme storm events would pose risk of injury or property damage.

Resource Management Plan. A document containing the requirements of Section 7 of this ordinance.

Rill Erosion is a process in which numerous small channels of only several inches in depth are formed, but cumulatively remove significant quantities of topsoil.

Sediment means the solid mineral or organic material that is in suspension, is being transported, or has been moved from its original location by erosion and has been deposited at another location.

Sedimentation means the process of depositing sediment or that which has resulted in the deposition of sediment.

Soil Loss Tolerance (T) means the maximum average annual rate of soil loss from sheet and rill erosion or wind erosion, expressed in tons per acre per year, that will

not reduce the indefinitely sustainable productive capacity of the soil to produce food and fiber.

Watershed Management Organization ("WMO") means a watershed management organization as defined by Minnesota Statutes Section 103B.205.

Wetlands means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this definition, wetlands must have the following three attributes: (1) have a predominance of hydric soils; (2) are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and (3) under normal circumstances support a prevalence of such vegetation.

Section 5.0. Application for Permit to Conduct Land Disturbing Activity.

A. Except as otherwise provided in this Article it shall be unlawful for anyone to conduct land disturbing activities without having first obtained a written land disturbing activity permit from the Jurisdiction in accordance with this Article.

B. All applications for a permit to conduct a land disturbing activity shall be made on forms provided by the Administrator and shall be accompanied by a resource management plan, a non-refundable fee set by resolution of the Town Board, and a cash escrow to reimburse the Jurisdiction for its out-of-pocket costs. The resource management plan must be signed by a registered civil engineer.

Section 6.0. Exemptions. The following "Land Disturbing Activities" do not require a permit:

A. Minor land disturbance activities such as home gardens and individuals' home landscaping, repairs, and maintenance work.

B. Construction, installation, and maintenance of electric, telephone, or cable television utility lines or individual service connection to these utilities.

C. On site septic systems.

D. Drain tiling, tilling, planting, or harvesting of agricultural, horticultural, or silvicultural crops.

E. Preparation of land for a single-family residence separately built if a building permit has been issued, unless:

- (1) in conjunction with multiple construction in a subdivision development,
or

- (2) 10,000 or more square feet of land or 100 or more lineal feet of shoreline is anticipated to be disturbed in such activities, or where 50 or more cubic yards of materials are anticipated to be moved in such activities.

F. Disturbed land areas for commercial or noncommercial uses of less than 10,000 square feet in size, except where any natural or artificial storage and retention areas, wetlands, or public waters are anticipated to be filled or drained.

G. Installation of fence, sign, telephone, or electric poles and other kinds of posts or poles.

H. Emergency work to protect life, limb, or property and emergency repairs, provided the land area disturbed is adequately shaped and stabilized when appropriate in accordance with the requirements of the local plan-approving authority or the district.

I. Activity permitted by the Minnesota Pollution Control Agency through an NPDES permit that regulates construction site erosion control.

Section 7.0. Resource Management Plan. The resource management plan shall include:

- (1) the name, address, and phone number of the applicant;
- (2) legal description of the property;
- (3) site plan including scale, north arrow, and number of streets;
- (4) schedule of anticipated starting and completion dates of each land disturbing activity including installation of construction site erosion control measures needed to meet the requirements of the ordinance;
- (5) location map with major streets and landmarks;
- (6) project description;
- (7) survey;
- (8) utility lines;
- (9) 2-foot contour map;
- (10) existing drainage flow patterns and receiving water body(ies);
- (11) existing public waters and natural or artificial water storage and retention areas, and their individual 100-year flood elevations;

- (12) existing vegetation;
- (13) soils mapped;
- (14) critical erosion area(s);
- (15) final contours;
- (16) final drainage flow patterns;
- (17) final vegetation and permanent stabilization measures;
- (18) location and description of erosion and sediment control practices;
- (19) location and description of storm water management control practices;
- (20) description of the maintenance of all erosion and sediment and storm water management control practices.
- (21) an aerial map if required by the Township Engineer.

The resource management plan shall address the following criteria:

- (1) stabilization of exposed soil areas and soil stockpiles;
- (2) establishment of permanent vegetation;
- (3) prevention of sediment damages;
- (4) scheduling of erosion and sediment control practices;
- (5) use of temporary sediment basins;
- (6) construction of slopes;
- (7) control of storm water discharge to minimize downstream erosion potential;
- (8) stabilization of waterways and outlets;
- (9) protection of storm sewer inlet from sediment;
- (10) working in or crossing water bodies;
- (11) underground utility construction;
- (12) construction access routes;

- (13) disposal of temporary erosion and sediment control measures; and
- (14) maintenance of erosion and sediment control practices.

Section 8.0. Review of Resource Management Plan. The Administrator may consult with the district in review of the resource management plan for determination of the technical adequacy and effectiveness of the proposed plan and its compliance with the standards in this Ordinance. The Administrator shall notify the applicant of its decision.

Section 9.0. Approval of Resource Management Plan; Permit Issuance; Letter of Credit/Cash Deposit.

A. If the Administrator determines that the resource management plan meets the requirements of this Ordinance, the Administrator shall issue a permit valid for a specified period of time, that authorizes the land disturbing activity contingent upon the satisfactory implementation and completion of the approved resource management plan. The permit shall reference the specific approved plan or approved revision thereof and shall contain provisions deemed necessary to ensure the maintenance of any permanent or temporary practices.

B. Upon approval of the resource management plan and before the permit is issued, the Administrator shall require the developer to provide a letter of credit or cash deposit in favor of the Jurisdiction sufficient to insure the satisfactory installation, completion, and maintenance of the measures and procedures as required in the approved resource management plan.

Section 10.0. Denial of Resource Management Plan. If the Administrator determines that the resource management plan does not meet the requirements of this Ordinance, the Administrator shall deny the issuance of a permit to the applicant. The developer may seek to revise the proposed resource management plan and reapply for a permit.

Section 11.0. Inspection. The Administrator shall inspect the developer's or landowner's progress of implementing the resource management plan. If the Administrator finds that insufficient progress or a non-compliant activity is occurring, the Administrator shall immediately notify the developer or landowner of the problem and demand compliance within a specified period of time of one to five days and temporarily suspend any other permits related to the project. If compliance is not achieved or corrective work commenced, the Administrator shall utilize the letter of credit, cash deposit, or other surety in favor of the Jurisdiction and execute a contract for the necessary corrective work.

Section 12.0. Certification of Completion of Resource Management Plan. After all of the required measures and procedures as described in the resource management plan have been executed by the developer, the Administrator shall conduct a review to ensure that all required measures and procedures have been properly executed by the developer.

A. If the Administrator determines that the resource management plan has been adequately executed and all permanent measures have been established, the Administrator shall issue a certification of completion certificate to the developer.

B. If the Administrator determines that the developer has not adequately executed the resource management plan, as approved, the Administrator shall require the developer to initiate and complete measures to rectify the deficiencies and to bring the overall project into compliance with the provisions of this Ordinance.

Section 13.0. Restoration Required. If the developer does not implement the resource management plan, the Administrator may order the developer to restore the development site, in whole or in part, to compliant conditions as they existed prior to the initiation of the land disturbing activity.

Section 14.0. Maintenance of Permanent Measures. The developer, his/her heirs or assigns, normally shall be responsible for the long term maintenance of any permanent measure designed to control erosion, sedimentation, or storm water runoff, or to protect natural or artificial water storage or retention areas, or to protect public waters, unless the Jurisdiction has accepted an easement of deed from the developer.

ARTICLE II.

STORM WATER MANAGEMENT STANDARDS

Section 1.0. Purpose. The purpose of this Article is to prevent or reduce, to the most practicable extent, storm water runoff and its associated effects within the Jurisdiction and to provide for the protection of natural and artificial water storage and retention areas and public waters, Further, this Article clarifies the performance standards as they pertain to the permit system, including standards and specifications for conservation practices and planning activities, to minimize storm water runoff damages in order to prevent degradation of water and soil resources.

Section 2.0. Performance Standards. Proper storm water management shall be followed within the Jurisdiction as described in this Article. All land disturbing activity, whether or not a permit is required, shall adhere to the following storm water management standards:

A. The following are general standards:

- (1) The need for storm water management facilities shall be reduced by incorporating the use of natural topography and land cover such as wetlands, ponds, natural swales and depressions as they exist before development to the degree that they can accommodate the additional flow of water without compromising the integrity or quality of the wetland or pond.
- (2) The following storm water management practices shall be used in developing a storm water management plan:

(a) Infiltration of runoff on-site, if suitable soil conditions are available for use;

(b) Flow attenuation by use of open vegetated swales and natural depressions;

(c) Storm water retention facilities; and

(d) Storm water detention facilities.

A combination of successive practices may be used to achieve the applicable minimum control requirements. Justification shall be provided by the applicant for the method selected.

- (3) Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized and protected as soon as possible and facilities or methods used to retain sediment on the site.
- (4) When development density, topographic features, and soil vegetation conditions are not sufficient to adequately handle storm water runoff using natural features and vegetation, various types of constructed facilities such as diversions, settling basins, skimming devices, dikes, waterways, and ponds may be used. Preference shall be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and manmade materials and facilities.

B. The following are specific standards:

- (1) All storm water management facilities necessary to manage increased runoff shall be constructed so that the two-year, ten-year and 100-year storm peak discharge rates existing before the proposed development shall not be increased and accelerated and channel erosion will not occur as a result of the proposed land disturbing or development activity. If required by the jurisdiction, an applicant shall also make an in-kind or monetary contribution to the development and maintenance of community storm water management facilities designed to serve multiple land disturbing and development activities undertaken by one or more persons, including the applicant.
- (2) Drainage plans for a conveyance system shall be designed for a 50 year storm recurrence interval. Storm water ponding shall be based on a 6.0 inch 24 hour storm event.
- (3) Impervious surface coverage of single family residential lots shall not exceed 25 percent of the lot area.
- (4) Storm water facilities must be designed and installed consistent with best management practices. Where natural wetlands exist or if ponds

are incorporated into the stormwater plan, the water quality entering the wetland, and the water surface elevation fluctuation must be considered in determining if additional facilities will be needed to maintain the integrity or quality of the existing wetlands or ponds.

- (5) New constructed storm water outfalls to any public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.
- (6) All storm water ponds shall be designed and constructed in accordance with National Urban Runoff Program (NURP) criteria. Generally stormwater ponds shall be constructed outside of existing wetlands, with the exception of degraded wetlands where all other federal, state, and local wetland permits have been obtained and allow construction of the stormwater pond in the wetland.

ARTICLE III. EROSION AND SEDIMENT CONTROL STANDARDS

Section 1.0. Purpose. The purpose of this Article is to prevent or reduce to the most practicable extent, erosion and sedimentation and their associated effects within the Jurisdiction and to provide for the protection of natural and artificial water storage and retention areas and public waters.

Section 2.0. Performance Standards. Proper erosion and sediment control practices shall be followed within the Jurisdiction as described in this Article. All land disturbing activity, whether or not a permit is required, shall adhere to the following standards:

- A. The following are general standards:
 - (1) No land occupier or developer shall cause or conduct any land disturbing activity which causes excessive erosion or sedimentation or which results in damages to water or soil resources.
 - (2) All development shall conform to the natural limitations presented by the topography and soil types in order to minimize soil erosion and sedimentation.
 - (3) Land disturbing activities shall only occur in increments of workable size such that adequate erosion and sediment controls can be provided throughout all phases of the development. The smallest practical area of land shall be exposed or otherwise disturbed at any one period of time.
- B. The following are specific standards:

- (1) No land disturbing activity shall cause active gully erosion or negative off-site impacts.
- (2) No land disturbing activity shall cause an increase in channel erosion in any watercourse, whether permanent or intermittent, at any time during or following development.
- (3) No land disturbing activity shall cause the creation of unstable slopes persisting after the completion of the development.
- (4) Permanent or temporary soil stabilization must be applied to disturbed areas (areas where vegetation has been removed or where cuts have been made), as soon as possible, not to exceed 15 days after a substantial portion of rough grading has been conducted, unless an extension is granted by the Jurisdiction. Soil stabilization measures should be selected to be appropriate for the time of year, site conditions, and estimated duration of use. Soil stockpiles must be stabilized or protected with sediment trapping measures to prevent soil loss.
- (5) A permanent vegetative cover shall be established on disturbed areas not otherwise permanently stabilized.
- (6) Properties adjacent to the site of a land disturbance shall be protected from sediment deposition.
- (7) Sediment basins and traps, perimeter dikes (for diversion), sediment barriers (silt curtains or hay bales), and other measures intended to trap sediment on-site must be constructed as a first step in grading and be made functional before upslope land disturbance takes place. Earthen structures such as dams, dikes, and diversions must be seeded and mulched within 15 days of installation.
- (8) Storm water runoff from drainage areas with more than five acres of disturbed area must pass through a temporary sediment trapping basin or other suitable sediment trapping facility.
- (9) Cut and fill slopes must be designed and constructed in a manner which will minimize erosion. Slopes which are found to be eroding excessively within one year of construction must be provided with additional slope stabilizing measures until the problem is corrected.
- (10) Properties and waterways downstream from development sites shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of storm water runoff.

- (11) All on-site storm water conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a 5-year frequency storm without erosion.
- (12) All storm sewer inlets which are made operable during construction shall be protected so that sediment-laden water will not enter the conveyance system without first being filtered or otherwise treated to remove sediment.
- (13) Construction vehicles should be kept out of water-courses to the extent possible.
- (14) The construction of underground utility lines shall be subject to the following criteria:
 - (a) No more than 500 feet of trench are to be opened at one time unless approved by the Jurisdiction.
 - (b) Where consistent with safety and space considerations, excavated material is to be placed on the uphill side of trenches.
 - (c) Trench dewatering devices shall discharge in a manner which will not adversely affect flowing streams, drainage systems, or off-site property and must comply with Minnesota Pollution Control Agency and Minnesota Department of Water Resources permit requirements.
- (15) Wherever construction vehicle access routes intersect paved public roads, provisions must be made to minimize the transport of sediment by runoff or vehicle tracking onto the paved surface.
- (16) All temporary erosion and sediment control measures shall be disposed of within 30 days after final site stabilization is achieved or after the temporary measures are no longer needed, unless otherwise authorized by the Jurisdiction.
- (17) All temporary and permanent erosion and sediment control practices must be maintained and repaired as needed to assure continued performance of their intended function.
- (18) Best management practices must be followed.

ARTICLE IV.

EFFECTIVE DATE, PENALTY, AND SEVERABILITY

Section 1.0. Effective Date. This Ordinance shall be effective immediately following its passage and publication.

Section 2.0. Penalty. Violation of this Ordinance or of a permit or order issued pursuant to this Ordinance is a misdemeanor punishable by up to ninety (90) days in jail and a \$700.00 fine. Violation of this Ordinance may also be enjoined. Every day that a violation occurs is a separate violation.

Section 3.0. Severability. If any Article, Section, subsection, sentence, clause, phrase, or other portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions of this Ordinance, it being the intent of the Jurisdiction that this Ordinance shall stand, notwithstanding the invalidity of any Article, section, subsection, sentence, clause, phrase, or other portion thereof.

ADOPTED by the Board of Supervisors of Stillwater Township 25 day of August, 1994.

STILLWATER TOWNSHIP

BY: *Dean O'Byrne*
Its Chairperson

ATTEST:
Car Santel
Its Clerk or Acting Clerk