

Chapter 48 - STORMWATER MANAGEMENT<sup>[1]</sup>

## Sec. 48-1. - Statutory authorization.

This chapter is adopted pursuant to the authorization and policies contained in M.S.A. Chapters 103B, 103D, and 462; Minnesota Rules Parts 6120.2500 to 6120.3900; and Minnesota Rules Chapters 8410 and 8420. This chapter is intended to meet the construction site erosion and sediment control and post-construction stormwater management regulatory requirements for construction activity and small construction activity (NPDES Permit) as defined in 40 CFR 122.26(b)(14)(x) and (b)(15), respectively. This chapter is intended to meet the minimal impact design standards (MIDS) developed under M.S.A. § 115.03 subd. 5c.

(Ord. No. 850, § 1, 5-2-16)

## Sec. 48-2. - Findings.

The city hereby finds that uncontrolled and inadequately planned use of wetlands, woodlands, natural habitat areas, areas subject to soil erosion, areas containing restrictive soils, and uncontrolled stormwater and construction site erosion from land disturbing activities and land development adversely affects the public health, safety and general welfare by impacting water quality and contributing to other environmental problems, creating nuisances, impairing other beneficial uses of environmental resources and hindering the ability of the city to provide adequate water, sewage, flood control, and other community services. In addition, extraordinary public expenditures may be required for the protection of persons and property in such areas and in areas which may be affected by unplanned land usage.

(Ord. No. 850, § 1, 5-2-16)

## Sec. 48-3. - Purpose.

The purpose of this chapter is to promote, preserve, and enhance the natural resources within the city and to protect them from adverse effects caused by poorly sited or planned development, or incompatible activities by regulating land-disturbing or development activities that would have an adverse and potentially irreversible impact on water quality and unique and environmentally sensitive land. The regulations in this chapter minimize conflicts and encourage compatibility between land-disturbing and development activities, and water quality and environmentally sensitive lands. The regulations in this chapter require detailed review standards and procedures for land-disturbing or development activities proposed for such areas. The regulations thereby achieve a balance between urban growth and development and protection of water quality and natural areas. Specific purposes of this chapter are to establish performance standards that will:

- (1) Meet minimal impact design standards (MIDS) for performance.
- (2) Assist in meeting NPDES/SDS municipal separate storm sewer system (MS4) and construction stormwater general permit requirements.
- (3) Assist in meeting total maximum daily load (TMDL) plan waste load allocations for impaired waters through quantification of load reductions.
- (4) Assist in meeting policies and performance standards of the Middle St. Croix Watershed Management Organization (MSCWMO).
- (5) Protect life and property from dangers associated with flooding.
- (6) Protect public and private property and natural resources from damage resulting from stormwater runoff and erosion.
- (7) Ensure site design minimizes the generation of stormwater and maximizes pervious areas for stormwater treatment.

- (8) Provide a single, consistent set of performance goals that apply to all developments.
- (9) Protect water quality from pollutant loadings of sediment, suspended solids, nutrients, heavy metals, toxics, debris, bacteria, pathogens, biological impairments, thermal stress and other pollutants.
- (10) Promote infiltration and groundwater recharge.
- (11) Provide vegetated corridors (buffers) to protect water resources from development.
- (12) Protect functional values of all types of natural waterbodies (e.g., rivers, streams, wetlands, lakes, seasonal ponds).
- (13) Sustain or enhance biodiversity (native plant and animal habitat) and support riparian ecosystems.

(Ord. No. 850, § 1, 5-2-16)

#### Sec. 48-4. - Definitions.

For the purpose of this chapter, the following terms, phrases, words, and their derivatives shall have the meanings stated below. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The word "shall" is always mandatory and not merely directive.

*Applicant:* any person or owner of land who wishes to obtain a building permit, zoning, subdivision, stormwater, or erosion and sediment control permit approval.

*Atlas 14:* the precipitation frequency estimates released by the National Weather Service Hydrometeorological Studies Design Center, volume 8 (2013), which provides precipitation frequency estimates for many Midwestern states including Minnesota.

*Best management practices (BMPs):* the most effective and practicable means of erosion prevention and sediment control, and water quality management practices that are the most effective and practicable means to control, prevent, and minimize degradation of surface water, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, pollution prevention through good housekeeping, and other management practices published by state or designated area-wide planning agencies.

*Better site design:* the control and management of stormwater quantity and quality through the application of better site design techniques as outlined in the current version of the Minnesota Stormwater Manual. Better site design includes preservation of natural areas, site reforestation, stream and shoreland buffers, open space design, disconnection of impervious cover, rooftop disconnection, grass channels, stormwater landscaping, compost and amended soils, impervious surface reduction, and trout stream protection.

*Common plan of development or sale:* a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

*Control measure:* a practice or combination of practices to control erosion and attendant pollution.

*Construction activity:* construction activity as defined in 40 CFR 122.26(b)(14)(x) and small construction activity as defined in 40 CFR 122.26(b)(15) and construction activity as defined by Minn. Rules 709.0080 subp. 4. This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling, and excavating. Construction activity includes the disturbance of less than one acre of total land area that is a part of a larger common plan of development or sale if the larger

common plan will ultimately disturb one acre or more. Construction activity does not include a disturbance to the land of less than five acres for the purpose of routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

*Development, new:* any development that results in the conversion of land that is currently prairie, agriculture, forest, or meadow and has less than 15 percent impervious surface. Land that was previously developed, but now razed and vacant, will not be considered new development.

*Detention facility:* a permanent natural or manmade structure, including wetlands, for the temporary storage of runoff which contains a permanent pool of water.

*Dewatering:* the removal of surface or ground water to dry and/or solidify a construction site to enable construction activity. Dewatering may require a Minnesota Department of Natural Resources (DNR) water appropriation permit, and if dewatering water is contaminated, discharge of such water may require an individual MPCA NPDES/SDS permit.

*Energy dissipation:* methods employed at pipe outlets to prevent erosion caused by the rapid discharge of water scouring soils. Examples include, but are not limited to concrete aprons, riprap, splash pads, and gabions that are designed to prevent erosion.

*Erosion and sediment control plan:* a plan for projects disturbing less than one acre that is in compliance with the minimum requirements of the MSCWMO. The plan identifies erosion prevention and sediment control practices, location and timelines for installation that conform to the current requirements of NPDES/SDS Construction Stormwater General Permit. The plan also includes responsible parties and timelines for inspection and maintenance.

*Erosion prevention:* measures employed to prevent erosion. Examples include but not limited to soil stabilization practices, limited grading, mulch, temporary erosion protection or permanent cover, and construction phasing.

*Flood fringe:* the portion of the floodplain outside of the floodway.

*Floodplain:* the areas adjoining a watercourse or water basin that have been or may be covered by a regional flood.

*Floodway:* the channel of the watercourse, the bed of water basins, and those portions of the adjoining floodplains that are reasonably required to carry and discharge floodwater and provide water storage during a regional flood.

*Fully reconstructed impervious surface:* areas where impervious surfaces have been removed down to the underlying soils. Activities such as structure renovation, mill and overlay projects, and pavement rehabilitation projects that do not alter underlying soil material beneath the structure, pavement, or activity are not considered fully reconstructed impervious surfaces. Reusing the entire existing building foundation and re-roofing of an existing building are not considered fully reconstructed.

*General contractor:* the party who signs the construction contract with the owner or operator to construct the project described in the final plans and specifications. Where the construction project involves more than one contractor, the general contractor could be the party responsible for managing the project on behalf of the owner or operator. In some cases, the owner or operator may be the general contractor. In these cases, the owner may contract an individual as the operator who would become the co-permittee.

*Green infrastructure:* a wide array of practices at multiple scales that manage wet weather and that maintains or restores natural hydrology by infiltrating, evapotranspiring, or harvesting and using stormwater. On a regional scale, green infrastructure is the preservation or restoration of natural landscape features, such as forests, floodplains and wetlands, couples with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On a local scale, green infrastructure consists of site and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements and cisterns.

*Hydric soils:* soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

*Hydrophytic vegetation:* macrophytic plant life growing in water, soil or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

*Impervious surface:* a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

*Land disturbance:* any activity that results in a change or alteration in the existing ground cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, stockpiling, excavation, and borrow pits. Routine vegetation management, and mill and overlay/resurfacing activities that do not alter the soil material beneath the pavement base, are not considered land disturbance. In addition, other maintenance activities such as catch basin and pipe repair/replacement, lighting, and pedestrian ramp improvements shall not be considered land disturbance for the purposes of determining permanent stormwater management requirements.

*Linear project:* construction or reconstruction of roads, trails, sidewalks, and rail lines that are not part of a common plan of development or sale. Mill, overlay and other resurfacing projects are not considered to be reconstruction.

*Major subdivision:* all subdivisions not classified as minor subdivisions, including, but not limited to, subdivisions of four or more lots, or any size subdivision requiring any new street or extension of the local government facilities, or the creation of any public improvements.

*MIDS:* the stormwater minimal impact design standards (MIDS), based on low impact development (LID)—an approach to storm water management that mimics a site's natural hydrology as the landscape is developed. MIDS represents the next generation of stormwater management and contains three main elements that address current challenges: (1) a higher clean water performance goal, (2) new modeling methods and credit calculations, and (3) a credits system and model ordinance package.

*MIDS performance goals:* the stormwater quality and quantity performance goals for new development, redevelopment, and linear development. The performance goals include the flexible treatment options for sites with restrictions, better site design standards, and stormwater rate controls.

*Minor subdivision:* any subdivision containing not more than three lots fronting on an existing street, not involving any new street or road, or the extension of municipal facilities, or the creation of any public improvements, and not adversely affecting the remainder of the parcel or adjoining property, and not in conflict with any provisions or portion of the comprehensive plan, official map, zoning ordinance, or the subdivision ordinance.

*National pollutant discharge elimination system (NPDES):* the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act (Sections 301, 318, 402, and 405) and 33 CFR §§ 1317, 1328, 1342, and 1345.

*Normal wetted perimeter:* the area of a conveyance, such as a ditch, channel, or pipe that is in contact with water during flow events that are expected to occur from a two-year 24-hour storm event.

*Notice of termination:* notice to terminate coverage under this permit after construction is complete, the site has undergone final stabilization, and maintenance agreements for all permanent facilities have been established, in accordance with all applicable conditions of this permit.

*Operator:* the person designated by the owner, who has day to day operational control and/or the ability to modify project plans and specifications related to the stormwater pollution prevention plan (SWPPP). The operator must be named on the permit as the permittee.

*Owner:* the person or party possessing the title of the land on which the construction activities will occur; or if the construction activity is for a lease, easement, or mineral rights license holder, the party or individual identified as the lease, easement or mineral rights license holder; or the contracting government agency responsible for the construction activity.

*Permanent cover:* surface types that will prevent soil failure under erosive conditions. Examples include: gravel, asphalt, concrete, rip rap, roof tops, perennial cover, or other landscaped material that will permanently arrest soil erosion. A uniform perennial vegetative cover (e.g., evenly distributed, without large bare areas) with a density of 70% of the native background vegetative cover for the area must be established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures. Permanent cover does not include the practices listed under temporary erosion protection.

*Permittee:* a person or persons, firm, or governmental agency or other entity that signs the application submitted to the MPCA and is responsible for compliance with the terms and conditions of the construction permit.

*Person:* any individual, firm, corporation, partnership, franchisee, association or governmental entity.

*Public waters:* all water basins and watercourses of the state as defined in M.S.A. § 103G.005 subd. 15.

*Redevelopment:* any development that is not considered new development.

*Regional flood:* a flood that is representative of large floods known to have occurred generally in the state and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of a 100-year recurrence interval.

*Resubdivision:* a change in a map of an approved or recorded subdivision plat if such change affects any street layout on such map or area reserved thereon for public use, or any lot line; or if it affects any map or plan legally recorded prior to the adoption of any regulations controlling subdivisions.

*Retain:* manage stormwater on site using a low-impact development approach so that the rate and volume of predevelopment stormwater reaching receiving waters is unchanged.

*Retention facility:* a permanent natural or manmade structure that provides for the storage of stormwater runoff by means of a permanent pool of water.

*St. Croix Riverway:* all lands and public waters within the riverway boundary subject to the standards and criteria for the Lower Saint Croix National Scenic Riverway in Minnesota.

*Saturated soil:* the highest seasonal elevation in the soil that is in a reduced chemical state because of soil voids being filled with water. Saturated soil is evidenced by the presence of redoximorphic features or other information.

*Sediment:* solid matter carried by water, sewage, and/or other liquids.

*Sediment control:* methods employed to prevent sediment from leaving the site. Sediment control practices include: silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, bio rolls, rock logs, compost logs, storm drain inlet protection, and temporary or permanent sedimentation basins.

*Small construction activity:* small construction activity as defined in 40 CFR 122.26(b)(15). Small construction activities include clearing, grading and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.

*Stabilized:* exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Grass, agricultural crop or other seeding alone is not stabilization. Mulch materials must achieve approximately 90 percent ground coverage (typically two ton/acre).

*Standard plates:* general drawings showing a common or repeated construction activity or practice.

*Stormwater:* precipitation runoff, stormwater runoff, snowmelt runoff, and any other surface runoff and drainage (as defined in Minn. Rules 7077.0105 subp. 41(b)).

*Stormwater pollution prevention plan (SWPPP):* a plan for stormwater discharge that includes erosion prevention BMPs, sediment control BMPs and permanent stormwater management systems that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site nonpoint pollution.

*Structure:* anything manufactured, constructed or erected which is normally attached to or positioned on land, including portable structures, earthen structures, roads, parking lots, and paved storage areas.

*Subdivision:* the division of a parcel of land into two or more lots or parcels, for the purpose of transfer of ownership or building development. The term includes resubdivision and, when appropriate to the context, shall relate to the process of subdividing or to the land subdivided.

*Surface water or waters:* all streams, lakes, ponds, marshes, wetlands, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private, except that surface waters do not include treatment basins or ponds that were constructed from upland.

*Temporary erosion protection:* methods employed to prevent erosion during construction activities. Examples of temporary erosion protection include; straw, wood fiber blanket, wood chips, vegetation, mulch and rolled erosion control products.

*Underground waters (groundwater):* water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. The term groundwater shall be synonymous with underground water.

*Waters of the state:* all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof (as defined in M.S.A. § 115.01 subd. 22).

*Wetland or wetlands:* all areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (as defined in Minn. Rules 7050.0130 subp. F). Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. For purposes of this definition, wetlands must have the following 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;
- (3) Under normal circumstances support a prevalence of such vegetation.

(Ord. No. 850, § 1, 5-2-16)

Sec. 48-5. - Scope and effect.

(a) *Applicability.*

- (1) Unless otherwise exempted by section 48-5(b) an approved stormwater management permit shall be required to land development that meets any activity of 48-8(g)(2). All stormwater management permits shall include an erosion sediment control plan or a stormwater pollution prevention plan (SWPPP).
  - (2) Unless otherwise exempted by section 48-5(b), a grading and filling permit including an erosion and sediment control plan shall be required prior to any proposed land disturbing activity that meets any criteria of 48-8(h)(2).
- (b) *Exemptions.* The provisions of this chapter do not apply to:
- (1) Resubdivisions.
  - (2) Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
  - (3) Emergency work to protect life, limb or property.
  - (4) Routine agricultural activity such as tilling, planting, harvesting, and associated activities.  
Other agricultural activities are not exempt including activities such as construction of structures.
  - (5) Silvicultural/forestry activity.
- (c) *Waiver.* The city council, upon recommendation of the planning commission, may waive any requirement of this chapter upon making a finding that compliance with the requirement will involve an unnecessary hardship and the waiver of such requirement will not adversely affect the standards and requirements set forth in section 48-6. The city council may require as a condition of the waiver, such dedication or construction, or agreement to dedicate or construct as may be necessary to adequately meet said standards and requirements.

(Ord. No. 850, § 1, 5-2-16)

#### Sec. 48-6. - Plan approval procedures.

- (a) *Pre-application meeting.* At the discretion of the zoning administrator, the city may facilitate a pre-application meeting with the applicant, city staff (or their authorized representative), and staff of relevant partner agencies (e.g. Washington Conservation District (WCD), MSCWMO, MNDNR, etc.). The purposes of the meeting are to understand the general parameters of the proposed project and to convey the requirements of meeting the provisions of the ordinance.
- (b) *Application.* A written application for stormwater management plan approval, along with the proposed stormwater management plan, shall be filed with the zoning administrator and shall include a statement indicating the grounds upon which the approval is requested, that the proposed use is permitted by right or as an exception in the underlying zoning district, and adequate evidence showing that the proposed use will conform to the standards set forth in this chapter. Prior to applying for approval of a stormwater management plan, an applicant may have the stormwater management plans reviewed by the appropriate departments of the city.

Two sets of clearly legible blue or black lined copies of drawings and required information shall be submitted to the zoning administrator and shall be accompanied by a receipt from the city administrator evidencing the payment of all required fees for processing and approval as set forth in section 48-7(e), and a bond when required by section 48-7(d) in the amount to be calculated in accordance with that section. Drawings shall be prepared to a scale appropriate to the site of the project and suitable for the review to be performed. At a minimum, the scale shall be one inch equals 100 feet.

The city shall make a determination regarding the completeness of a permit application and notify the applicant in writing if the application is not complete including the reasons the application was deemed incomplete.

- (c) *Plan.* The minimum information requirements of the application shall be consistent with the requirements in the most recent version of the NPDES/SDS construction stormwater general permit and MSCWMO performance standards. The application information must also include permanent treatment information showing the proposed

project meets the MSCWMO performance goals. The stormwater management plan shall contain the following information:

- (1) *Existing site map.* A map of existing site conditions showing the site and immediately adjacent areas, including:
  - a. The name and address of the applicant, the section, township and range, north point, date and scale of drawing and number of sheets;
  - b. Location of the tract by an insert map at a scale sufficient to clearly identify the location of the property and giving such information as the names and numbers of adjoining roads, railroads, utilities, subdivisions, towns and districts or other landmarks;
  - c. Existing topography with a contour interval appropriate to the topography of the land, but in no case having a contour interval greater than two feet;
  - d. A delineation of all streams, rivers, public waters and wetlands located on and immediately adjacent to the site, including depth of water, a description of all vegetation which may be found in the water, a statement of general water quality and any classification given to the water body or wetland by the Minnesota Department of Natural Resources, the Minnesota Pollution Control Agency, and/or the United States Army Corps of Engineers;
  - e. Location and dimensions of existing stormwater drainage systems and natural drainage patterns on and immediately adjacent to the site delineating in which direction and what rate stormwater is conveyed from the site, identifying the receiving stream, river, public water, or wetland, and setting forth those areas of the unaltered site where stormwater collects;
  - f. A description of the soils of the site, including a map indicating soil types of areas to be disturbed as well as a soil report containing information on the suitability of the soils for the type of development proposed and for the type of sewage disposal proposed and describing any remedial steps to be taken by the developer to render the soils suitable;
  - g. Vegetative cover and clearly delineating any vegetation proposed for removal; and
  - h. 100-year floodplains, flood fringes and floodways.
- (2) *Site construction plan.* A site construction plan, including:
  - a. Locations and dimensions of all proposed land-disturbing activities and any phasing of those activities;
  - b. Locations and dimensions of all construction site erosion control measures necessary to meeting the requirements of this chapter;
  - c. Schedule of anticipated starting and completion date of each land-disturbing activity, including the installation of construction site erosion control measures needed to meet the requirements of this chapter; and
  - d. Provisions for maintenance of the construction site erosion control measures during construction.
- (3) *Plan of final site conditions.* A plan of final site conditions on the same scale as the existing site map showing the site changes, including:
  - a. Finished grading shown at contours at the same interval as provided above or as required to clearly indicate the relationship of proposed changes to existing topography and remaining features;
  - b. A landscape plan, drawn to an appropriate scale, including dimensions and distances and the location, type, size and description of all proposed landscape materials which will be added to the site as part of the development;
  - c. A drainage plan of the developed site delineating in which direction and at what rate stormwater will be conveyed from the site and setting forth the areas of the site where stormwater will be allowed to collect;
  - d. The proposed size, alignment and intended use of any structures to be erected on the site;
  - e. A clear delineation and tabulation of all new and fully reconstructed impervious surface areas; and



- f. Any other information pertinent to the particular project which in the opinion of the applicant is necessary for the project.

(Ord. No. 850, § 1, 5-2-16)

Sec. 48-7. - Plan review procedure.

- (a) *Process.* Stormwater management plans meeting the requirements of section 48-6 shall be submitted by the zoning administrator to the planning commission for review in accordance with the standards of section 48-8. The commission shall recommend approval, recommend approval with conditions, or recommend denial of the stormwater management plan. Following planning commission action, the stormwater management plan shall be submitted to the city council at its next available meeting. City council action on the stormwater management plan must be accomplished within 120 days following the date the application for approval is filed with the zoning administrator.
- (b) *Duration.* Approval of a plan submitted under the provisions of this chapter shall expire one year after the date of approval unless construction has commenced in accordance with the plan. However, if, prior to the expiration of the approval, the applicant makes a written request to the zoning administrator for an extension of time to commence construction setting forth the reasons for the requested extension, the zoning administrator may grant one extension of not greater than one single year. Receipt of any request for an extension shall be acknowledged by the zoning administrator within 15 days. The zoning administrator shall make a decision on the extension within 30 days of receipt. Any plan may be revised in the same manner as originally approved.
- (c) *Conditions.* A stormwater management plan may be approved subject to compliance with conditions reasonable and necessary to insure that the requirements contained in this chapter are met. Such conditions may, among other matters, limit the size, kind or character of the proposed development, require the construction of structures, drainage facilities, storage basins and other facilities, require replacement of vegetation, establish required monitoring procedures, stage the work over time, require alteration of the site design to insure buffering, and require the conveyance to the city or other public entity of certain lands or interests therein.
- (d) *Performance bond or letter of credit.* Prior to approval of any stormwater management plan, the applicant shall submit an agreement to construct such required physical improvements, to dedicate property or easements, or to comply with such conditions as may have been agreed to. Such agreement shall be accompanied by a performance bond or letter of credit to cover the amount of the established cost of complying with the agreement. The city council will determine whether a performance bond or a letter of credit will be used to cover costs of complying with the agreement. The agreement and bond or letter of credit shall guarantee completion and compliance with conditions within a specific time, which time may be extended in accordance with subsection (b). The adequacy, conditions and acceptability of any agreement, performance bond or letter of credit shall be determined by the city council or any official of the city as may be designated by resolution of the city council.
- (e) *Fees.* All applications for stormwater management plan approval shall be accompanied by a processing and approval fee which is designated in appendix D—Fee schedule. All applications that cause the city to expend funds for the payment of city staff or city consultants shall reimburse the city for the actual city staff costs and consultant fees expended by the city in connection with such application.
- (f) *Modification of permitted plans.* The applicant must amend an approved ESC plan or SWPPP to include additional requirements such as additional or modified BMPs designed to correct problems whenever:
- (1) There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to surface water or underground water.
  - (2) Inspections or investigations by site operators, local, state or federal officials indicate the plans are not effective in eliminating or significantly minimizing the discharge of pollutants to surface water or underground water or that the discharges are causing water quality standard exceedances.

(3) The plan is not achieving the general objectives of minimizing pollutants in stormwater discharges associated with activity.

- (g) *Permit completion.* Before work under the permit is deemed complete, the permittee must submit as-builts, a long term maintenance plan and agreement and information demonstrating that the stormwater facilities conform to design specifications.

(Ord. No. 850, § 1, 5-2-16)

Sec. 48-8. - Approval standards.

- (a) *Application review.* The applicant shall not commence any construction activity subject to this chapter until a permit has been authorized by the city.
- (b) *Permit authorization.* If the city determines that the application meets the requirements of this chapter, the city may issue approval authorizing the project or activity. The approval shall be valid for one year.
- (c) *Permit denial.* If the city determines the application does not meet the requirements of this chapter the application must be denied. If the application is denied, the applicant will be notified of the denial in writing including reasons for the denial. Once denied, a new application must be resubmitted for approval before any activity may begin.
- (d) *Better site design.* Whenever possible, development projects shall be designed using the better site design techniques of the current version of the Minnesota Stormwater Manual.
- (e) *MIDS calculator.* Final site design and choice of permanent stormwater volume reduction practices shall be based on outcomes of the MIDS calculator (or other model that shows the performance goal can be met) and shall meet the performance goals in section 48-8(h)(3) of this chapter.
- (f) *Buffer requirement.* Buffer locations and widths must comply with the State of Minnesota, Minnesota Pollution Control Agency, and Middle St. Croix Watershed Management Organization standards.
- (g) *Erosion and sediment control.*
- (1) *Site design.* The following general criteria shall be incorporated in site design for erosion and sediment control:
    - a. Minimize disturbance of natural soil cover and vegetation.
    - b. Minimize, in area and duration, exposed soil and unstable soil conditions.
    - c. Protect receiving water bodies, wetlands and storm sewer inlets.
    - d. Protect adjacent properties from sediment deposition.
    - e. Minimize off-site sediment transport on trucks and equipment.
    - f. Minimize work in and adjacent to waterbodies and wetlands.
    - g. Maintain stable slopes.
    - h. Avoid steep slopes and the need for high cuts and fills.
    - i. Minimize disturbance to the surrounding soils, root systems and trunks of trees adjacent to site activity that are intended to be left standing.
    - j. Minimize the compaction of site soils.
  - (2) *Erosion and sediment control plan.*
    - a. Unless otherwise exempted by this chapter in section 48-5(b), a grading and filling permit including an erosion and sediment control plan shall be required prior to any proposed land disturbing activity that meets any of the criteria in i through iii, immediately below:
      1. Any project undertaking grading, filling, or other land alteration activities which involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land.
      2. Any project with wetland impacts, grading within public waters, grading within buffers or within 40-

feet of the bluff line.

3. A land disturbing activity, regardless of size, that the city determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion and sediment control standard set forth in this chapter.

(h) *Stormwater pollution prevention.*

- (1) *Site design.* The following general criteria shall be incorporated in site design for stormwater runoff to protect surface and ground water and other natural resources by maintaining pre-development hydrological conditions:

- a. Reduce impacts on water.
- b. Protect soils.
- c. Preserve vegetation.
- d. Decrease runoff volume.
- e. Decrease erosion and sedimentation.
- f. Decrease flow frequency, duration, and peak runoff rates.
- g. Increase infiltration (groundwater recharge).
- h. Maintain existing flow patterns.
- i. Reduce peak flows.
- j. Store stormwater runoff on-site.
- k. Avoid channel erosion.

- (2) *Stormwater management permit.*

- a. Unless otherwise exempted by section 48-5(b), an approved stormwater management permit shall be required prior to any proposed land development activity that meets any of the criteria in 1. through 5., immediately below. All stormwater management permits shall include an erosion and sediment control plan or a stormwater pollution prevention plan (SWPPP).
  1. Any project that creates or fully reconstruct 6,000 square feet or more of impervious surface.
  2. All major subdivisions or minor subdivisions that are part of a common plan of development.
  3. Projects within the St. Croix Riverway that add 500 square feet of additional impervious surface.
  4. Any project requiring a variance from the current local impervious surface zoning requirements for the property.
  5. Any land development activity, regardless of size, that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property.

- (3) *Stormwater volume reduction performance standards.*

- a. Any applicant for a stormwater management permit as defined in section 48-8(h)(2)b. of this article must meet the following performance goals:
  1. *New development volume control.* For new, nonlinear developments on sites without restrictions, stormwater runoff volumes will be controlled and the post-construction runoff volume shall be retained on site for 1.1 inches of runoff from all impervious surfaces on the site.
  2. *Redevelopment volume control.* Nonlinear redevelopment projects on sites without restrictions that create or fully reconstruct impervious surfaces shall capture and retain on site 1.1 inches of runoff from the new and/or fully reconstructed impervious surfaces.
  3. *Linear development volume control.* Linear projects on sites without restrictions that create new and/or fully reconstructed impervious surfaces, shall capture and retain the larger of the following:
    - a) 0.55 inches of runoff from the new and fully reconstructed impervious surfaces on the site;

- b) 1.1 inches of runoff from the net increase in impervious area on the site;
- b. Flexible treatment alternatives for sites with restrictions (as found in the MIDS Design Sequence Flowchart). The MIDS Design Sequence Flowchart can be found in the Minnesota Stormwater Manual. Applicant shall attempt to comply fully with the appropriate performance goals described above. Alternatives considered and presented shall examine the merits of relocating project elements to address varying soil conditions and other constraints across the site. If full compliance is not possible due to any of the factors listed below, the applicant must document the reason. If site constraints or restrictions limit the full treatment goal, the following flexible treatment alternatives shall be used:

Applicant shall document the flexible treatment alternatives sequence starting with alternative #1 for new development and redevelopment or alternative #1 for linear development. If alternative #1 cannot be met, then alternative #2 shall be analyzed. Applicants must document the specific reasons why alternative #1 cannot be met based on the factors listed below. If alternative #2 cannot be met then alternative #3 shall be met. Applicants must document the specific reasons why alternative #2 cannot be met based on the factors listed below. When all of the conditions are fulfilled within an alternative, this sequence is completed. Volume reduction techniques considered shall include infiltration, reuse and rainwater harvesting, and canopy interception and evapotranspiration and/or additional techniques included in the MIDS calculator and the Minnesota Stormwater Manual. Higher priority shall be given to BMPs that include volume reduction. Secondary preference is to employ filtration techniques, followed by rate control BMPs.

1. Factors to be considered for each alternative will include:
  - a) Karst geology.
  - b) Shallow bedrock.
  - c) High groundwater.
  - d) Hotspots or contaminated soils.
  - e) Drinking water source management areas or within 200 feet of drinking water well.
  - f) Zoning, setbacks or other land use requirements.
  - g) Poor soils (infiltration rates that are too low or too high, problematic urban soils).
2. *Alternative #1.* Applicant attempts to comply with the following conditions:
  - a) Achieve at least 0.55 inch volume reduction from all impervious surfaces if the site is new development or from the new and/or fully reconstructed impervious surfaces for a redevelopment site.
  - b) Remove 75 percent of the annual TP load from all impervious surfaces if the site is new development, or from the new and/or fully reconstructed impervious surfaces for a redevelopment site.
  - c) Alternatives considered and presented shall examine the merits of relocating project elements to address varying soil conditions and other constraints across the site.
3. *Alternative #2.* Applicant attempts to comply with the following conditions:
  - a) Achieve volume reduction to the maximum extent practicable.
  - b) Remove 60 percent of the annual TP load from all impervious surfaces if the site is new development or from the new and/or fully reconstructed impervious surfaces for a redevelopment or linear development site.
  - c) Alternatives considered and presented shall examine the merits of relocating project elements to address varying soil conditions and other constraints across the site.
4. *Alternative #3.* Off-site treatment.

Mitigation equivalent to the original performance goal for new development, linear development, or redevelopment, as described above in this section, (including banking or cash) can be performed off-site to protect the receiving water body. Off-site treatment shall be achieved in areas selected in the following order of preference:

- a) Locations that yield benefits to the same receiving water that receives runoff from the original construction activity.
  - b) Locations within the same department of natural resource (DNR) catchment area (Hydrologic Unit 08) as the original construction activity.
  - c) Locations within the next adjacent DNR catchment area upstream.
  - d) Locations anywhere within the city's jurisdiction.
- (4) *Stormwater management rate control.* For new development, redevelopment, and linear development sites the site design shall provide on-site treatment during construction and post-construction to ensure no increase in offsite peak discharge for the one-year, two-year, ten-year, and 100-year, 24-hour storm events based on the standards defined by the MSCWMO. For individual building lots not part of a common plan of development site rate control requirements do not apply.
- (i) *Other design standards.*
- (1) *Minnesota Stormwater Manual.* All volume control for water quality and quantity and site design specifications shall conform to the current version of the Minnesota Stormwater Manual.
  - (2) *NPDES/SDS construction stormwater general permit.* i All volume control and water quality and quantity best management practice design specifications shall conform to the current version of the NPDES/SDS construction stormwater general permit.
  - (3) *Site erosion and sediment control requirements.* All erosion and sediment control requirements shall conform to the current requirements of NPDES/SDS construction stormwater general permit.
  - (4) *Watershed district/WMO requirements.* All stormwater management and erosion and sediment control activities shall comply with all applicable requirements of the watershed districts or watershed management organizations in which the project is located. In the event provisions in this chapter and requirements of watershed district or watershed management organizations overlap or conflict, the strictest provisions shall apply to the activities.
- (j) *Failure to meet standards.* Any stormwater management plan which fails to meet the standards contained in this section shall not be approved by the city council.
- (k) *Site dewatering.* Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, upflow chambers, hydro-cyclones, swirl concentrators or other controls that are appropriate. Water may not be discharged in a manner that causes erosion or flooding of the site, receiving channels or a wetland.
- (l) *Waste and material disposal.* Any storage, handling, and disposal of solid and hazardous waste, including unused building materials and construction products, shall conform with the most recent version of the NPDES/SDS construction stormwater general permit.
- (m) *Design standards.* Stormwater detention facilities constructed in the city shall be designed according to the most current technology as approved by the city engineer and shall contain, at a minimum, the following design factors:
- (1) A stormwater pond must have a permanent pool equal to or greater than 1,800 cubic feet of storage below the outlet pipe for each acre that drains to the basin.
  - (2) The basin's permanent volume must reach a depth of at least three feet and must have no depth greater than ten feet.
  - (3) A permanent pool length-to-width ratio of 3:1 or greater.
  - (4) A minimum protective shelf extending ten feet into the permanent pool with a slope of 10:1, beyond which

- slopes should not exceed 3:1.
- (5) A buffer of unmowed natural vegetation surrounding the basin 100 year flood elevation.
  - (6) All stormwater detention facilities shall have a device to keep oil, grease, and other floatable material from moving downstream as a result of normal operations.
  - (7) All stormwater detention facilities must have pretreatment to remove coarse-grained particles.
  - (8) Where applicable, a minimum of 20 feet shall be provided on all sides of all publically owned stormwater facilities for facility maintenance.
  - (9) All stormwater management facilities shall be preserved by dedication or perpetual easement, including maintenance access to the municipality.
- (n) *Wetlands.*
- (1) Runoff shall not be discharged directly into wetlands without water quality treatment.
  - (2) A buffer of natural vegetation shall surround all wetlands. The location and width of protective buffers shall comply with the standards of the MSCWMO, Minnesota Pollution Control Agency, Board of Water and Soil Resources and the United States Army Corps of Engineers.
  - (3) Wetlands must not be drained or filled, wholly or partially, unless in accordance with the MSCWMO, Minnesota Pollution Control Agency, Board of Water and Soil Resources and the United States Army Corps of Engineers.
- (o) *Steep slopes.* Land-disturbing or development activities shall be allowed on slopes of 18 percent or more by the discretion of the city engineer.
- (p) *Catch basins.* All newly installed and rehabilitated catch basins shall be provided with a sump area for the collection of coarse-grained material. Such basins shall be cleaned when they are half-filled with material.
- (q) *Drain leaders.* All newly constructed and reconstructed buildings will route drain leaders to pervious areas wherein the runoff can be allowed to infiltrate. The flow rate of water exiting the leaders shall be controlled so no erosion occurs in the pervious areas.

(Ord. No. 850, § 1, 5-2-16; Ord. No. 859, § 1, 5-1-17)

#### Sec. 48-9. - Inspections.

- (a) *Inspections and record keeping.*
- (1) *Applicant responsibilities.* The applicant is responsible for inspections and record keeping during and after construction for all privately-owned stormwater treatment practices on the site.
  - (2) *City inspections.* The city reserves the right to conduct inspections on a regular basis to ensure that both temporary and permanent stormwater management and erosion and sediment control measures are properly installed and maintained prior to construction, during construction, and at the completion of the project.
- (b) *Right of entry and inspection.*
- (1) *Powers.* The issuance of a permit constitutes a right-of-entry for the city or its authorized representative to enter upon the construction site. Upon presentation of credentials, the applicant shall allow the city, or its authorized representatives, to:
    - a. Enter the permitted site for the purpose of obtaining information, examination of records, and conducting investigations or surveys;
    - b. Bring such equipment upon the permitted site as is necessary to conduct such surveys and investigations;
    - c. Examine and copy any books, papers, records, or memoranda pertaining to activities or records required to be kept under the terms and conditions of the permit;
    - d. Inspect the stormwater pollution control measures;

- e. Sample and monitor any items or activities pertaining to stormwater pollution control measures;
  - f. Correct deficiencies in stormwater and erosion and sediment control measures.
- (c) *Fees.* Fees will be applied per appendix D—Fee schedule of the Bayport Code of Ordinances.
- (d) *Long term inspection and maintenance of stormwater facilities.*
- (1) *Private stormwater facilities.*
    - a. *Maintenance plan required.* No private stormwater facilities may be approved unless a maintenance agreement is provided that defines who will conduct the maintenance, the type of maintenance necessary to ensure effective performance, and the maintenance intervals. All private stormwater facilities shall be inspected by the property owner and maintained in proper condition by the owner consistent with the performance goals for which they were originally designed.
    - b. *Facility access.* The applicant shall obtain all necessary easements or other property interests to allow access to the facilities for inspection or maintenance for both the responsible party and the City or authorized representative.
    - c. *Removal of settled materials.* All settled materials including settled solids, shall be removed from ponds, sumps, grit chambers, and other devices as necessary and disposed of in accordance with MPCA BMP sediment removal and disposal guidance.
    - d. *Inspections.* All stormwater facilities within the city shall be inspected by the property owner during construction, during the first year of operation, and at a frequency consistent with the maintenance plan. Inspection reports shall be provided to the city upon request.
  - (2) *Public stormwater facilities.*
    - a. *Acceptance of publicly owned facilities.* Before work under the permit is deemed complete; the permittee must submit as-builts and a maintenance plan demonstrating at the time of final stabilization that the stormwater facilities conform to design specifications. A final inspection shall be required before the city accepts ownership of the stormwater facilities.
    - b. *Maintenance.* The city shall perform maintenance of publicly owned stormwater facilities in accordance with their comprehensive stormwater management plan and other regulatory requirements.
- (e) *Watershed management plans/groundwater management plans.* Stormwater management plans shall be consistent with the Middle St. Croix Watershed Management Organization, other adopted watershed management plans and groundwater management plans prepared in accordance with M.S.A. §§ 1038.231 and 1038.255 respectively, and as approved by the state board of water and soil resources in accordance with state law.
- (f) *Easements.* If a stormwater management plan involves direction of some or all runoff off of the site, it shall be the responsibility of the applicant to obtain from adjacent property owners any necessary easements or other property interests concerning flowage of water.

(Ord. No. 850, § 1, 5-2-16)

Sec. 48-10. - Enforcement.

- (a) *Notification of failure of the permit.* The city shall notify the permit holder of the failure of the permit's measures.
  - (1) *Initial contact.* The initial contact will be to the party or parties listed on the application and/or the stormwater management plan as contacts. Such notification should be in writing, but if it is verbal, a written notification should follow as quickly as practical. Except during an emergency action, 48 hours after notification by the city or 72 hours after the failure of erosion and sediment control measures, whichever is less, the city at its discretion, may begin corrective work. There are conditions when time is of the essence in controlling erosion. Where such conditions exist, the city may take immediate action, and then notify the applicant as soon as possible.

- (2) *Erosion off-site.* If erosion breaches the perimeter of the site, the applicant shall immediately develop a cleanup plan, obtain the right-of-entry from the adjoining property owner, and implement the cleanup and restoration plan within 24 hours of obtaining the adjoining property owner's permission. In no case, unless written approval is received from the adjoining property owner, more than seven calendar days go by without corrective action being taken. If, in the discretion of the city, the applicant does not repair the damage caused by the erosion, the city may do the remedial work required. When restoration to the original condition or other resources is required, the applicant shall be required to work with the appropriate agencies to ensure that the work is done properly.
- (3) *Erosion into streets, wetlands or water bodies.* If eroded soils (including tracked soils from construction activities) enter or appear likely to enter streets, wetlands, or other water bodies, cleanup and repair shall be immediate. The applicant shall provide all traffic control and flagging required to protect the traveling public during the cleanup operations.
- (4) *Failure to do corrective work.* When an applicant fails to conform to any provision of this ordinance within the time stipulated, the City may take the following actions:
- a. Issue a stop work order.
  - b. Withhold the scheduling of inspections.
  - c. Withhold the issuance of a certificate of occupancy.
  - d. Revoke any permit issued by the city to the applicant for the site in question or any other of the applicant's sites within the city's jurisdiction.
  - e. Correct the deficiency, or hire a contractor to correct the deficiency.
    1. The applicant shall reimburse the city for all costs incurred in correcting stormwater pollution control deficiencies. If payment is not made within 30 days after costs are incurred by the city, payment shall be made from the applicant's financial securities as described in city's zoning ordinance.
    2. If there is an insufficient financial amount in the applicant's financial securities as required by the city's zoning ordinance, the City may assess the remaining amount against the property. As a condition of the permit, the owner shall waive notice of any assessment hearing to be conducted by the city, concur that the benefit to the property exceeds the amount of the proposed assessment, and waive all rights by virtue of M.S.A. § 429.081 to challenge the amount or validity of assessment.
- (b) *Construction stop work orders.* The city reserves the right to issue construction stop work orders when cooperation with inspections is withheld, or when a violation of this ordinance is identified that requires immediate attention to protect human health and/or the environment.
- (c) *Other actions to ensure compliance.* The city can take any combination of the following actions in the event of a failure by applicant to meet the terms of this ordinance:
- (1) Withhold inspections or issuance of certificates or approvals.
  - (2) Revoke any permit issued by the city to the applicant.
  - (3) Conduct remedial or corrective action on the development site or adjacent site affected by the failure.
  - (4) Charge applicant for all costs associated with correcting the failure or remediating damage from the failure; if payment is not made within 30 days, payment will be made from the applicant's financial securities.
  - (5) Bring other actions against the applicant to recover costs of remediation or meeting the terms of this chapter.

(Ord. No. 850, § 1, 5-2-16)

Sec. 48-11. - Penalty.

- (a) Any person, firm or corporation that violates any of the provisions of this chapter shall be guilty of a misdemeanor offense punishable by a fine not exceeding \$700.00 or imprisonment for a term not exceeding 90 days, or both fine and imprisonment at the discretion of the court.



(b) Each day that a separate violation exists shall constitute a separate offense.

(Ord. No. 850, § 1, 5-2-16)

Sec. 48-12. - Other controls.

In the event of any conflict between the provisions of this chapter and the provisions of an erosion control or shoreland protection ordinance adopted by the city council, the more restrictive standard prevails.

(Ord. No. 850, § 1, 5-2-16)