CHAPTER 13. WETLAND PROTECTION

Section 1300 – General Regulations

1300.01 Scope and Effect.

Subd. 1 Applicability. Every applicant for subdivision approval, or a permit to allow land disturbing activities must submit a storm water management plan to the city. No building permit involving land disturbing activities, subdivision approval, or permit to allow land disturbing activities shall be issued until approval of the storm water management plan or a waiver of the approval requirement has been obtained in strict conformance with the provisions of this Code.

Subd. 2 Waiver. The City Council, upon recommendation of the Planning Commission, may waive any requirement of this section 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 this section. However, a waiver by the City Council does not release the applicant from complying with other agency permits. The City Council may require as a condition of the waiver, such dedicating or construct as may be necessary to adequately meet said standards and requirements.

1300.02 Storm Water Management Plan Approval Procedures.

Subd. 1 Application. A written application for a storm water management plan approval, along with the proposed storm water management plan, shall be filed with the city and shall include a statement indicating 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 Code.

Two sets of clearly legible blue or black lined copies of drawings and required information shall be submitted to the city and shall be accompanied by a receipt from the City Clerk evidencing the payment of all required fees for processing and approval as set forth in this code, and bond when required. Drawings shall be prepared to a scale appropriate to the size of the project and suitable for the review to be performed. At a minimum the scale shall be 1 inch equals 100 feet.

Subd. 2 Storm Water Management Plan. At a minimum, the storm water management plan shall contain the following information:

A. Existing Site Map. A map of existing site conditions showing the site and immediately adjacent areas, including:

1. The name and address of the applicant, the section, township and range, north point, date and scale of drawing and number of sheets;
2. 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;
3. Existing topography with a contour interval appropriate to the topography of the land but in no case having a contour interval greater than 2 feet;
4. A delineation of all streams, rivers, public waters and wetlands located on and immediately adjacent to the site, including 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;
5. Location and dimensions of existing storm water drainage systems and natural drainage patterns on and immediately adjacent to the site delineating which direction and at what rate storm water is

conveyed from the site, identifying the receiving stream, river, public water, or wetlands and setting forth those areas of the unaltered site where storm water collects;
6. Vegetative cover and clearly delineating any vegetation proposed for removal; and
7. 100 year floodplains, flood fringes and floodways.

B. Site Construction Plan. A site construction plan including:

1. Locations and dimensions of all proposed land disturbing activities and any phasing of those activities;
2. Locations and dimensions of all temporary soil or dirt stockpiles;
3. Locations and dimensions of all construction site erosion control measures necessary to meet the requirements of this Code;
4. 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 Code; and
5. Provisions for maintenance of the construction site erosion control measures during construction.

C. 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:

1. 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;
2. 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;
3. A drainage plan of the developed site delineating in which direction and at what rate storm water will be conveyed from the site and setting forth the areas of the site where storm water will be allowed to collect. Any collection of storm water must be designed and signed by a professional engineer and a copy of the hydrology and hydrologic calculations must be submitted for review;
4. The proposed size, alignment and intended use of any structures to be erected on the site;
5. A clear delineation and tabulation of all areas which shall be paved or surfaced, including a description of the surfacing material to be used; and
6. Any other information pertinent to the particular project which in the opinion of the applicant is necessary for the review of the project.

1300.03 Plan Review Procedure for Wetlands Regulations.

Subd. 1 Process. Storm water management, for subdivisions, commercial and industrial plans meeting the requirements of this Code shall be submitted by the city staff to the Planning Commission for review. Any subdivision project including four (4) lots or more must be reviewed by the City Engineer, also any project involving 1 acre or more must be reviewed by the City Engineer, prior to Planning Commission review. The Commission shall recommend approval, recommend approval with conditions, or recommend denial of the storm water management plan. Following Planning Commission action, the storm water management plan shall be submitted to the City Council, at its next available meeting. For storm water management plans involving new homes and other land disturbing activities, the city planning department will review and approve, disapprove or modify the plan. The city staff may, at their discretion, submit any plan to the Planning Commission or the City Council for approval.

Subd. 2 Duration. Approval of a plan submitted under the provision of this Code 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 city for an extension of time to commence construction setting forth the reasons for the requested extension, the planning department may grant one extension of not greater than one single year. Receipt of any request for an extension shall be acknowledged by the city within 15 days. The city planning department shall make a decision on the extension within 30 days of receipt. Any plan may be revised in the same manner as originally approved.

Subd. 3 Conditions. A storm water management plan may be approved subject to compliance with conditions reasonable and necessary to insure that the requirements contained in this Code 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.

Subd. 4 Performance Bond. Prior to approval of any storm water management plan, for subdivision, commercial, industrial development, and at the discretion of the planning department residential building permits, 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 bond to cover the amount of the established cost of complying with the agreement. The agreement and bond shall guarantee completion and compliance with conditions with a specific time, which time may be extended in accordance with this section. The adequacy, conditions and acceptability of any agreement and bond shall be determined by the City Council.

1300.04 Storm Water Plan – Approval Standards. No storm water management plan which fails to meet the standards contained in this section, shall be approved by the City Council.

Subd. 1 Site De-watering. Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, upflow chambers, hydro-cyclones, swirl concentrators or other appropriate controls as appropriate. Water may not be discharged in a manner that causes erosions or flooding of the site or receiving channels or a wetland.

Subd. 2 Waste and Material Disposal. All waste and unused building materials (including garbage, debris, cleaning wastes, wastewater, toxic materials or hazardous materials) shall be properly disposed of off-site and not allowed to be carried by runoff into a receiving channel or storm sewer system.

Subd. 3 Tracking. Each site shall have graveled roads, access drives and parking areas of sufficient width and length to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public or private road shall be removed by street cleaning (not flushing) before the end of each workday.

Subd. 4 Drain Inlet Protection. All storm drain inlets shall be protected during construction until control measures are in place with a straw bale, silt fence or equivalent barrier meeting accepted design criteria, standards and specifications contained in the MPCA publication "Protecting Water Quality in Urban Areas".

Subd. 5 Site Erosion Control. The following criteria (A through D) apply only to construction activities that result in runoff leaving the site.

A. Channeled runoff adjacent areas passing thorough the site shall be diverted around disturbed areas, if practical. Otherwise, the channel shall be protected as described below. Sheet flow runoff from adjacent areas greater than 10,000 square feet in area shall also be diverted around disturbed areas, unless shown to have resultant runoff rates of less than 0.5 ft./sec. across the disturbed areas for the one year storm. Diverted runoff shall be conveyed in a manner that will not erode the conveyance and receiving channels.
B. All activities on the site shall be conducted in a logical sequence to minimize the area of bare soil exposed at any one time.
C. Runoff from the entire disturbed area on the site shall be controlled by meeting any of subparagraphs 1, 2, or 3, described below.

    1. All disturbed ground left inactive for fourteen or more days shall be stabilized by seeding or sodding (only available prior to September 15) or by mulching or covering or other equivalent control measure.

2. For sites with more than ten acres disturbed at one time, or if a channel originates in the disturbed area, one or more temporary or permanent sedimentation basins shall be constructed. Each sedimentation basin shall have a surface area of at least one percent of the area draining to the basin and at least three feet of depth and constructed in accordance with accepted design specifications, sediment shall be removed to maintain a depth of three feet. The basin discharge rate shall also be sufficiently low as to not cause erosion along the discharge channel or the receiving water.
3. For sites with less than ten acres disturbed at one time, silt fences, straw bales, or equivalent control measures shall be placed along all sideslope and downslope sides of the site. If a channel or area of concentrated runoff passes through the site, silt fences shall be placed along the channel edges to reduce sediment reaching the channel. The use of silt fences, straw bales, or equivalent control measures must include a maintenance and inspection schedule.

D. Any soil or dirt storage piles containing more than ten cubic yards of material should not be located with a downslope drainage length of less than 25 feet from the toe of the pile to a roadway or drainage channel. If remaining for more than seven days, they shall be stabilized by mulching, vegetative cover, tarps or other means. Erosion from poles which will be in existence for less than seven days shall be controlled by placing straw bales or silt fence barriers around the pile. In-street utility repair or construction soil or dirt storage piles located closer than 25 feet of a roadway or drainage channel must be covered with tarps or suitable alternative control, if exposed for more than seven days, and the storm drain inlets must be protected with straw bale or other appropriate filtering barriers.

1300.05 Storm Water Management Criteria for Permanent Facilities.

Subd. 1 Facilities. An applicant shall install or construct, on or for the proposed land disturbing or development activity, all storm water management facilities necessary to manage increased runoff 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 channel erosion will not occur as a result of the proposed land disturbing or development activity. An applicant may 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.

Subd. 2 Facilities. The applicant shall give consideration to reducing the need for storm water management facilities 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.

Subd. 3 Plan Practices. The following storm water management practices shall be investigated in developing a storm water management plan in the following descending order of preference:

A. Natural infiltration of precipitation on site;
B. Flow attenuation by use of open vegetated swales and natural depressions;
C. Storm water retention facilities; and
D. Storm water detention facilities.

Subd. 4 Successive Practices. A combination of successive practices may be used to achieve the applicable minimum control requirements specified in Subdivision 1. Justification shall be provided by the applicant for the method selected.

1300.06 Design Standards for Storm Water Detention Facilities. Storm water detention facilties constructed into the city shall be designed according to the most current technology as reflected in the MPCA publication "Protecting Water Quality in Urban Areas," and shall contain, at a minimum, the following design factors:

A. A permanent pond surface area equal to two percent of the impervious area draining to the pond or one percent of-the entire area draining to the pond, whichever amount is greater;

B. An average permanent pool depth of four to ten feet;
C. A permanent pool length-to-width ratio of 3:1 or greater;
D. A protective buffer strip of vegetation surrounding the permanent pool at a minimum width of one rod (16.5 feet);
E. All storm water detention facilities shall have a device to keep oil, grease, and other floatable material for moving downstream as a result of normal operations;
F. Storm water detention facilities for new development must be sufficient to limit peak flows in each subwatershed to the flow that existed before the development for the 10 year storm event. All calculations and hydrologic models/information used in determining peak flows shall be submitted along with the storm water management plan;
G. All storm water detention facilities must have a forbay to remove coarse-grained particles prior to discharge into a watercourse or storage basin.

1300.07 Wetlands.

Subd. 1 Runoff. Runoff shall not be discharged indirectly into wetlands without pre-settlement of the runoff.

Subd. 2 Protective Buffer. A protective buffer strip of natural vegetation shall surround all wetlands. The width of the required buffer will be dependent on the functional value of the wetland (low, medium, or high), as determined by the Carver County Water Management Plan and the following Chart:

Wetland Value	Minimum Buffer Width
Low	25 ft
Medium	35 ft
High	50 ft

(Amended by Ord. 183, 7/10/2006)

Subd. 3 Draining and Filling. Wetlands must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas of at least equal public value. (The Federal, State, and County government also require permits and approval for wetland draining and filling, check with the appropriate agencies to obtain any necessary permits).

Replacement must be guided by the following principles in descending order of priority.

A. Avoiding the direct or indirect impact of the activity that may destroy or diminish the wetland;
B. Minimizing the impact by limiting the degree or magnitude of the wetland activity and its implantation;
C. Rectifying the impact by repairing, rehabilitating, or restoring the affected wetland environment;
D. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the activity; and
E. Compensating for the impact by replacing or providing substitute wetland resources or environments.

1300.08 Steep Slopes. No land disturbing or development activities shall be allowed on slopes of 25 percent (4:1) or more.

1300.09 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.

1300.10 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.

1300.11 Inspection and Maintenance. All storm water management facilities shall be designed to minimize the need of maintenance, to provide access for the maintenance purposes and to be structurally sound. All storm water management facilities shall have a plan of operation and maintenance that assures continued effective removal of pollutants carried in storm water runoff. The Director of Public Works, or designated representative shall inspect

all storm water management facilities during construction, during the first year of operation, and at least once every five years thereafter. The inspection records will be kept on file by the city for a period of 6 years. It shall be the responsibility of the applicant to obtain any necessary easements or other property interest to allow access to the storm water management facilities for inspection and maintenance purposes.

1300.12 Models/Methodologies/Computations. Hydrologic models and design methodologies used for the determination of runoff and analysis of storm water management structures shall be approved by the City Engineer. Plans, specification and computations for storm water management facilities submitted for review shall be sealed and signed by a registered professional engineer. All computations shall appear on the plans submitted for review, unless otherwise approved by the City Engineer.

1300.13 Watershed Management Plans/Groundwater Management Plans. Storm water management plans shall be consistent with adopted watershed management plans and groundwater management plans prepared in accordance with Minnesota Statutes section 103B.231 and 103B.255 respectively, and as approved by the Minnesota Board of Water and Soil Resources in accordance with state law.

1300.14 Easements. If a storm water management plan involves direction of some or all runoff of the site, it shall be the responsibility of the applicant to obtain from adjacent property owners any necessary easements of other property intersects concerning flowage of water.

1300.15 Lawn Fertilizer Regulations.

Subd. 1 Use of Impervious Surfaces. No person shall apply fertilizer deposit grass clippings, leaves, or other vegetative materials on impervious surfaces, or within storm water drainage systems, natural drainage ways, or within wetland buffer areas.

Subd. 2 Unimproved Land Areas. Except for driveways, sidewalks, patios, areas occupied by structures of areas which have been improved by landscaping, all areas shall be covered by plants or vegetative growth.

Subd. 3 Fertilizer Content. Except for the first growing season for newly established turf areas, no person shall apply liquid fertilizer which contains more than one-half percent by weight of phosphorus, or granular fertilizer which contains more than three percent by weight of phosphorus, unless the single application is less than or equal to one-tenth pound of phosphorus per one thousand square feet. Annual application amount shall not exceed one-half pound of phosphorus per one thousand square feet of lawn area.

Subd. 4 Buffer Zone. Fertilizer applications shall not be made within one rod (16.5 feet) of any wetland or water resource.