ORDINANCE NO. 452

AN ORDINANCE OF THE CITY OF LA CRESCENT RESTATING, SUPPLEMENTING AND AMENDING THE STORM WATER AND EROSION CONTROL ORDINANCE AND AMENDING THE CITY OF LA CRESCENT CODE

The City Council of the City of La Crescent, Houston County, Minnesota, hereby ordains:

SECTION I. The Storm Water and Erosion Control Ordinance of the City is here restated in relevant part with amendments thereto with respect to definitions and amending, appending certain procedural and substantive regulation.

SECTION II. The entire text of the Storm Water and Erosion Control Ordinance here enacted and the subject matter of this ordinance is incorporated hereat verbatim, including the restated provisions and amendments, eliminated portions lined-out, supplemental amendment provisions underscored,:

12.185 STORM WATER POLLUTION AND EROSION CONTROL

1. Purpose. The purpose of this ordinance is to use to the fullest current understanding of good design, architecture, landscape architecture and civil engineering to reduce the discharge of pollutants from the stormwater system to the Maximum Extent Possible (MEP) to protect water quality, and satisfy the appropriate water quality treatments of the Clean Water Act. The SWPPP consists of a combination of Best Management Practices (BMPs) including ediation, maintenance, control techniques, system design and engineering methods the City deems appropriate, as long as the BMPs meet the requirements of the Stormwater Pollution Prevention Plan (SWPPP).

   This ordinance establishes standards and specifications for conservation practices, planning activities, and construction activities which minimize storm water pollution, soil erosion, and sedimentation. It protects public health and property while encouraging retention of natural topographic features and existing vegetation and encouraging alternative approaches to conventional flatland development practices on steep slopes including imaginative and innovative techniques suited to the natural surroundings to enhance the existing and future appearances of hillsides.

2. Scope. Except where a variance is granted, any person, firm, sole

proprietorship, partnership, corporation, State agency, or political subdivision proposing a land disturbance activity within the City shall apply to the City for the approval of the storm water pollution control plan. No land shall be disturbed until the plan is approved by the City and conforms to the standards set forth herein.

3. Definitions. These definitions apply to this ordinance. Unless specifically defined below, the words or phrases used in this ordinance shall have the same meaning as they have in common usage. 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 words "shall" and "must" are always mandatory and not merely directive.

Applicant: Any person or group that applies for a building permit, subdivision approval, or a permit to allow land disturbing activities. Applicant also means that person's agents, employees, and others acting under this person's or group's direction. The term "applicant" also refers to the permit holder or holders and the permit holder's agents, employees, and others acting under this person's or group's direction.

Average Slope: Average slope shall be determined by use of the following formula: $S = 0.0023 \times I \times L \div A$

S = average slope (%)
.0023 = conversion factor (square feet to acres)
I = contour interval (distance between adjacent contour lines on a map) in feet
(not to exceed 10 feet)
L = the total length of the contour lines within the subject parcel
A = the area in acres of the subject parcel.

Slopes exceeding thirty-five (35) percent shall be excluded from lot area computations.

Best Management Practices (BMPs): Erosion and sediment control and water quality management practices that are the most effective and practicable means of controlling, preventing, and minimizing the degradation of surface water, including construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, and other management practices published by State or designated area-wide planning agencies. (Examples of BMPs can be found in the current versions of the Minnesota Pollution Control Agency's publications:

- "Protecting Water Quality in Urban Areas" and "Storm Water and Wetlands: Planning and Evaluation Guidelines for Addressing Potential Impacts of Urban Storm Water and a Snow Melt Runoff on Wetlands"
- The Metropolitan Council's "Minnesota Urban Small Sites BMP Manual" (available as a compact disk or on the Internet world wide web under the address: www.metrocouncil.org/environment/environment.htm)
- The United States Environmental Protection Agency's "Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices" (as a reference for BMPs)
- The Minnesota Department of Transportation's "Erosion Control Design Manual."

Bond: Any form of security including a cash deposit, surety bond, collateral, property, or instrument of credit in an amount and form satisfactory to the governing body. All bonds shall be approved by the governing body wherever a bond is required by these regulations.

Buffer: A protective vegetated zone located adjacent to a natural resource, such as a water of the State, that is subject to direct or indirect human alteration. Such a buffer strip is an integral part of protecting an aquatic ecosystem through trapping sheet erosion, filtering pollutants, reducing channel erosion and providing adjacent habitat. The buffer strip begins at the "ordinary high water mark" for wetlands and the top of the bank of the channel for rivers and streams. This start point corresponds to the Minnesota Department of Natural Resources' definition of a "shoreline" in Minnesota Rules 6115.0030. Therefore a stream with a width of thirty (30) feet between banks and one hundred (100) foot buffer strips has a total protected width of two hundred thirty (230) feet. Acceptable buffer vegetation includes preserving existing pre-development vegetation and/or planting locally distributed native Minnesota trees, shrubs and grassy vegetation. Alteration of buffers is strictly limited. Buffer areas are designated with permanent markers.

Building Pad: A building pad is the area on a lot within which the principal building will be constructed.

Certificate of Occupancy: A certificate issued by the Building Official after final inspection when it is found that the building and project complies with the provisions of the State Building Code, the City Code, and other laws which are enforced by the City. No building shall be

occupied until the Building Official has issued a Certificate of Occupancy, or a temporary certificate when warranted.

City: The City Council or its authorized representative charged with the administration and enforcement of this Ordinance or their regularly authorized deputy.

Common Plan of Development or Sale: A contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, or on different schedules, but under one proposed plan. This item is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land disturbing activities may occur.

Cribbing: The use of timbers in such a fashion so as to lend support to soil, to direct runoff or to prevent erosion.

Developer: Any person, group, firm, corporation, sole proprietorship, partnership, State agency, or political subdivision thereof engaged in a land disturbance activity.

Development: Any land disturbance activity that changes the site's runoff characteristics in conjunction with residential, commercial, industrial or institutional construction or alteration.

Discharge: The release, conveyance, channeling, runoff, or drainage, of storm water, including snow melt, from a construction site.

Energy Dissipation: This refers to methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to, aprons, riprap, splash pads, and gabions that are designed to prevent erosion.

Erosion: Any process that wears away the surface of the land by the action of water, wind, ice, or gravity. Erosion can be accelerated by the activities of people and nature.

Erosion Control: Refers to methods employed to prevent erosion. Examples include soil stabilization practices, horizontal slope grading, temporary or permanent cover, and construction phasing.

Erosion and Sediment Practice Specifications or Practice: The management procedures, techniques, and methods to control soil erosion and sedimentation as officially adopted by either the State, County, City,

or local watershed group, whichever is more stringent.

Escrow: Cash invested in the name of the City in a financial institution for the benefit of the City and the depositor.

Exposed Soil Areas: All areas of the construction site where the vegetation (trees, shrubs, brush, grasses, etc.) or impervious surface has been removed, thus rendering the soil more prone to erosion. This includes topsoil stockpile areas, borrow areas and disposal areas within the construction site. It does not include temporary stockpiles or surcharge areas of clean sand, gravel, concrete or bituminous, which have less stringent protection. Once soil is exposed, it is considered "exposed soil" until it meets the definition of "final stabilization."

Filter Strips: A vegetated section of land designed to treat runoff as overland sheet flow. They may be designed in any natural vegetated form from a grassy meadow to a small forest. Their dense vegetated cover facilitates pollutant removal and infiltration.

Final Stabilization: All soil disturbing activities at the site have been completed, and that a uniform (evenly distributed, e.g., without large bare areas) perennial vegetative cover with a density of seventy-five (75) percent of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures have been employed. Simply sowing grass seed is not considered final stabilization. Where agricultural land is involved, such as when pipelines are built on crop or range land, final stabilization constitutes returning the land to its pre-construction agricultural use. (Examples of vegetative cover practices can be found in the current version of the Minnesota Department of Transportation's publication "Supplemental Specifications to the 1994 Standard Specifications for Construction."

Grade: The vertical location of the ground. Existing grade is the grade prior to grading. Rough grade is the stage at which grade approximately conforms to the approved plan. Finish grade is the final grade of the site which conforms to the approved plan.

Grading Permit: A permit required to complete land disturbance activities.

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 existed prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

Land Disturbance Activity: Any land change that may result in the alteration of existing surface drainage patterns or soil erosion from water or wind and the movement of sediments into or upon waters or lands within this government's jurisdiction, including construction, clearing and grubbing, grading, excavating, transporting and filling of land. Within the context of this rule, land disturbance activity does not mean:

A. Minor land disturbance activities that do not alter existing surface drainage patterns such as home gardens and an individual's home landscaping, repairs, and maintenance work.

B. Tilling, planting, or harvesting of agricultural, horticultural, or silvicultural (forestry) crops.

C. Emergency work to protect life, limb, or property and emergency repairs, unless the land disturbing activity would have otherwise required an approved erosion and sediment control plan, except for the emergency. If such a plan would have been required, then the disturbed land area shall be shaped and stabilized in accordance with the City's requirements as soon as possible.

Native Vegetation: The pre-settlement (already existing in Minnesota at the time of statehood in 1858) group of plant species native to the local region, that were not introduced as a result of European settlement or subsequent human introduction.

Natural and Undisturbed State: No cut or fill work shall be done. The only acceptable use would be for conservation and recreation and then only if significant topological change and vegetation removal is not required.

Paved Surface: A constructed hard, smooth surface made of asphalt, concrete or other pavement material. Examples include, but are not limited to, roads, sidewalks, driveways and parking lots.

Permanent Cover: Final stabilization. Examples include grass, gravel, asphalt, and concrete. See also "Final Stabilization."

Permit: Within the context of this a rule, a permit is a written warrant or license granted for construction, subdivision approval, or to allow land disturbing activities.

Phased Project or Development: Clearing a parcel of land in distinct phases, with at least seventy-five (75) percent of the project's preceding phase meeting the definition of "final stabilization" and the remainder proceeding toward completion, before beginning the next phase of clearing.

Registered Professionals: A registered professional civil engineer, soils engineer, geologist, landscape architect, or other registered professional with experience and knowledge in the application of principles required to comply with this Ordinance.

Rip Rap: The use of stones, rocks or other loose objects placed in such a fashion so as to lend support to the soil and/or to protect against runoff and erosion.

Runoff Coefficient: The fraction of total precipitation that is not infiltrated into or otherwise retained by the soil, concrete, asphalt or other surface upon which it falls, that will appear at the conveyance as runoff. This coefficient is usually estimated for an event or on an average annual basis.

Runoff Rate: The rate of flow running over the surface of a site after the soil has reached saturated conditions, measured in units of volume versus time.

Sediment: The product of an erosion process; solid material both mineral and organic, that is in suspension, is being transported, or has been moved by water, wind, or ice, and has come to rest on the earth's surface either above or below water level.

Sedimentation: The process or action of depositing sediment.

Sediment Control: The methods employed to prevent sediment from leaving the development site. Examples of sediment control practices are silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary or permanent sedimentation basins.

Significant Redevelopment: Alterations of a property that changes the "footprint" of a site or building in such a way that results in the

disturbance of over one (1) acres of land. This term is not intended to include activities, which would not be expected to cause adverse storm water quality impacts and offer no new opportunity for storm water controls, such as exterior remodeling.

Slope: The inclination of the ground surface measured and expressed as a ratio of horizontal distance to vertical distance.

Soil: The unconsolidated mineral and organic material on the immediate surface of the earth. For the purposes of this document, temporary stockpiles of clean sand, gravel, aggregate, concrete or bituminous materials (which have less stringent protection) are not considered "soil" stockpiles.

Special Assessment: A cost levied by the City against a property for the purposes of recovering costs incurred by the City.

Stabilized: The exposed ground surface after it has been covered by sod, erosion control blanket, rip rap, pavement or other material that prevents erosion. Simply sowing grass seed is not considered stabilization.

Steep Slope: Any slope steeper than ten (10) percent (ten [10] feet of rise for every one hundred [100] feet horizontal run).

Storm Water: Under Minnesota Rule 7077.0105, subpart 41b storm water means "precipitation runoff, storm water runoff, snow melt runoff, and any other surface runoff and drainage." (According to the Code of Federal Regulations [CFR] under 40 CFR 122.26[b][13] "Storm water means storm water runoff, snow melt runoff and surface and drainage.") Storm water does not include construction site dewatering.

Storm Water Pollution Control Plan: A joint storm water and erosion and sediment control plan that is a document containing the requirements of Section 4, that when implemented will decrease soil erosion on a parcel of land and off site non-point pollution. It involves both temporary and permanent controls.

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: Any tract of land divided into building lots for private, public, commercial, industrial, etc. development. Minnesota Rule

6120.2500, subpart 17 defines subdivision as "land that is divided for the purpose of sale, rent, or lease, including planned unit development."

Substantial Building Permit: A building permit for an improvement which involves land disturbing activities. This shall not include activities such as roofing, siding, windows or similar activities.

Temporary Protection: Short term methods employed to prevent erosion. Examples of such protection are straw, mulch, erosion control blankets, wood chips, and erosion netting.

Terrace: A relatively level step or bench constructed in the face of a sloped surface for drainage and maintenance purposes.

Urban: Of, relating, characteristic of, constituting a City.

Vegetated or Grassy Swale: A vegetated earthen channel that conveys storm water, while treating the storm water by biofiltration. Such swales remove pollutants by both filtration and infiltration.

Very Steep Slope: Any slope steeper than one (1) foot of rise for each three (3) feet of horizontal run (thirty-five [35] percent slope).

Wet Detention Facility: A permanent man-made structure, containing a permanent pool of water, used for the temporary storage of runoff.

Wet Retention Facility: See wet detention facility.

4. Storm Water Pollution Control Plan and the Grading Plan. Every applicant for a substantial building permit, subdivision approval, or a permit to allow land-disturbing activities involving disturbing twenty thousand (20,000) cubic feet of land or more must submit a storm water pollution control plan and a grading plan to the City Engineer. No substantial building permit, subdivision approval, or permit to allow land disturbing activities shall be issued until the City approves these plans. At a minimum, the pollution abatement control practices proposed must conform to National Pollution Discharge Elimination Permit (NPDES) requirements, the filing or approval requirements of relevant Watershed Districts, Water Management Organizations, Ditch Authorities, Soil and Water Conservation Districts or other regulatory bodies in addition to those in the current version of the Minnesota Pollution Control Agency's publication "Protecting Water Quality in Urban Areas" and the most current version of the "Minnesota Storm Water Manual."

A. General Policy on Storm Water Runoff Rates.

1) Release rates from storm water treatment basins shall not increase over the pre-development twenty-four (24) hour two (2) year, ten (10) year and 100-year peak storm discharge rates, based on the last ten (10) years of how that land was used. Also accelerated channel erosion must not occur as a result of the proposed activity. For discharges to wetlands volume control is generally more important than discharge rate control.

2) Storm sewers shall be designed for the ten (10) year frequency storm, and a safe overflow elevation shall be provided for the 100- year frequency storm. The minimum storm sewer pipe is twelve (12) inches.

3) Drainage channels shall be designed to maintain the 25-year frequency storm within the graded portion of the channel and the 100-year frequency storm within the channel easement.

B. Maximum Impervious Area. The percentage of lot area covered by impervious surface shall be no more than the following in the average slope range specified:

10 – 15% slope	32% lot area impervious coverage
16 – 20% slope	25% lot area impervious coverage
21 – 25% slope	18% lot area impervious coverage
26 – 30% slope	10% lot area impervious coverage
31 – 35% slope	5% lot area impervious coverage

An exception may be made to these coverage limits where it is shown that the runoff rate from the lot is controlled in a manner which mitigates the effect of covering the lot with impervious surface, or where individual lot runoff is controlled at the subdivision level and no damage is likely to be incurred by adjacent properties. In no case shall lot coverage by buildings

exceed that limit set forth in other parts of the City Code. Slopes exceeding thirty-five (35) percent shall be excluded from lot area computations.

C. Maximum Disturbed Area. No more than three (3) times the allowable impervious area may be disturbed in areas where average slopes exceed ten (10) percent required by the City Engineer.

D. The Storm Water Pollution Control Plan and the Grading Plan. The storm water pollution control plan's measures, the area to be retained in the natural and undisturbed state and the location of buffer areas shall be marked on the approved grading plan, and identified with flags, stakes, signs, etc. on the development site before work begins. No land shall be disturbed or permits issued until these slope stakes are accepted in writing by the City of La Crescent. Slope stakes shall remain in place until all disturbed areas on the lot or plat have been permanently stabilized.

E. Inspections of the Storm Water Pollution Control Plan's Measures. At a minimum, such inspections shall be done weekly be either the City, developer or the developer's designated representative, and within twenty-four (24) hours after every storm or snow melt event large enough to result in runoff from the site (approximately .25 inches or more in 24 hours). At a minimum, these inspections shall be done during active construction.

F. Minimum Requirements of the Storm Water Pollution Control Plan. The plan shall contain or consider:

Requirement	Multi Lot Development	Single Lot Development
1. Name and address of applicant	Yes	Yes
2. Location of Project	Yes	Yes
3. Name and address of person(s) responsible for maintaining erosion and runoff measures	Yes	Yes
4. Project description: nature and purpose of land disturbing activity and amount of grading, filling, utility work and building construction	Yes	Yes
5. Construction phasing: Time frames and schedules of various project activities	Yes	No
6. Map of existing site conditions: topography, property information, slopes twelve (12) percent	Yes	Yes

or more over a distance of fifty (50) feet or more, bluff areas where the slope rises at least twenty five (25) feet above the toe of the bluff and grade of slope from toes of bluff to point twenty five (25) feet or more above the toe of bluff averages thirty (30) percent or greater, existing drainage systems/patterns, soil type, waterways, wetlands, vegetative cover, buffer strips and floodplain locations		
Requirement	**Multi Lot Development**	**Single Lot Development**
7. Site construction plan: location of proposed land disturbing activities, stock pile locations, erosion and sediment control plans, and construction schedule	Yes	Yes
8. Maintenance and inspection plan for storm water pollution and erosion control measures	Yes	No
9. Adjacent streams, rivers, residential areas, roads, etc. that might be affected by the land disturbing activity	Yes	No
10. Areas of the site potentially subject to serious erosion problems	Yes	No
11. Erosion and sediment control measures: proposed methods to be used to control erosion and sedimentation during and after the construction process	Yes	Yes
12. Permanent stabilization: how the site will be stabilized after construction is completed, including specifications, timeframes, or schedules	Yes	No
13. Design calculations: calculations made to determine the design of temporary and permanent sediment ponds, wet detention basins, diversions, waterways, infiltration zones, and other applicable practices	Yes	No

G. Minimum Requirements of the Grading Plan. The proposed grading plan shall contain the following information:

Information	**Multi Lot Development**	**Single Lot Development**
1. Name and address of applicant	Yes	Yes
2. Location of Project	Yes	Yes

3. Final plan signed by registered professional	Yes	No
4. Plan drawn at 1 inch = 40 feet or larger scale with a north arrow shown	Yes	Yes
5. Property limits are shown and all streets are labeled	Yes	Yes
6. Existing and proposed contours shown at two foot intervals	Yes	Yes
7. Lot and block information shown if property is platted; street address shown if not platted	Yes	No
8. Area and dimensions of all lots	Yes	Yes
9. Existing public and private utilities	Yes	Yes
10. Drainage arrows indicating direction of surface drainage	Yes	Yes
11. Areas of each lot that exceed 10% and 35% slopes should be clearly labeled	Yes	Yes
12. Slope stakes at the 20 foot offset to the 35% slope identifying land to be left in the natural undisturbed state	Yes	Yes
13. Proposed structures by type, building pads, paved areas, and utilities; all landscaping, walls, cribbing, rip rap, dams, terraces, or other structures needed for slope protection and runoff control	Yes	Yes1
Information	**Multi Lot Development**	**Single Lot Development**
14. Location and design of temporary and permanent sedimentation ponds	Yes	No
15. Location of all proposed silt fences	Yes	Yes
16. Amount of impervious surface and total disturbed area on each lot	Yes	No
17. Proposed elevation of the top of foundation of the principal structures on all lots	Yes	Yes
18. All proposed lot corner elevations	Yes	Yes
19. Location of all wetlands	Yes	No
20. Location, size and type of trees to be removed and new trees to be planted	Yes	Yes2
21. Percent of slope shown for streets and drainage swales	Yes	Yes3

1 Proposed structures, paved areas, walls, and terraces only
2 Location, size and type of trees to be removed only
3 Percent of slope of drainage swales only

H. General Storm Water Pollution Control Plan Criteria. The plan shall address the following:

Criteria	Multi Lot Development	Single Lot Development
1. Stabilizing all exposed soils and soil stock piles and the related time frame or schedule	Yes	Yes
2. Establishing permanent vegetation and related time frame and schedule	Yes	Yes
3. Preventing sediment damage to adjacent properties and other designated areas such as streams, wetlands, lakes, and unique vegetation (Oak groves, rare and endangered species habitats, etc.)	Yes	Yes4
4. Scheduling for erosion and sediment control practices	Yes	Yes
5. Where permanent and temporary sedimentation basins will be located	Yes	No
6. Engineering the construction and stabilization of steep and very steep slopes	Yes	Yes
7. Measures for controlling the quality and quantity of storm water leaving the site	Yes	No
8. Stabilizing all waterways and outlets	Yes	No
9. Protecting storm sewers from entrance of sediment	Yes	Yes
10. What precautions will be taken to contain sediment, when working in or crossing water bodies	Yes	No
11. Restabilizing utility construction areas as soon as possible	Yes	No
12. Protecting paved roads from sediment and mud brought in from access routes	Yes	Yes
13. The eventual disposing of temporary erosion and sediment control measures	Yes	Yes5
Criteria	**Multi Lot Development**	**Single Lot Development**
14. How the temporary and permanent erosion and sediment controls will be maintained	Yes	No
15. The disposal of collected sediment and floating debris	Yes	No

4 Impact on adjacent properties only
5 Removal of silt fence after stabilization

I. Minimum Storm Water Pollution Control Measures and Related Inspections. These minimum control measures are required where bare soil is exposed. Due to the diversity of individual construction sites, each site will be individually evaluated. Where additional control measures are needed, they will be specified at the discretion of the City Engineer. The City will determine what action is necessary.

1) All grading plans and building site surveys must be reviewed by the City for the effectiveness of erosion control measures in the context of site topography and drainage.

2) Sediment control measures must be properly installed by the builder before construction activity begins. Such structures may be adjusted during dry weather to accommodate short term activities, such as those allowing the passage of very large vehicles. As soon as this activity is finished or before the next runoff event, the erosion and sediment control structures must be returned to the configuration specified by the City. An inspection of sediment control measures must then be scheduled, and approved by City staff before a footing inspection will be done.

3) Diversion of channeled runoff around disturbed areas, if practical, or the protection of the channel.

4) Easements. If a storm water management plan involves directing some or all of the site's runoff, the applicant or his designated representative shall obtain from adjacent property owners any necessary easements or other property interests concerning the flowing of such water.

5) The scheduling of the site's activities to lessen their impact on erosion and sediment creation, so as to minimize the amount of exposed soil.

6) Control runoff as follows (either 1 and 2 or 1 and 3):
   a. Unless precluded by moderate or heavy snow cover (mulching can still occur if a light snow cover is present), stabilize all exposed inactive disturbed soil areas within two hundred (200) feet of any conveyance (curb, gutter, storm sewer inlet, drainage

ditch, etc.) with sod, seed or weed-free mulch. This must be done, if the applicant will not work the area for seven (7) days on slopes greater than three (3) feet horizontal to one (1) foot vertical (3:1), fourteen (14) days on slopes ranging from three to one (3:1) to ten to one (10:1) and twenty-one (21) days for slopes greater than ten to one (10:1).

b. For disturbed areas greater than one (1) acre, construct temporary or permanent sedimentation basins. Sedimentation basins must have a minimum surface area equal of at least one (1) percent of the area draining to basins, and be constructed in accordance with accepted design specifications including access for operations and maintenance. Basin discharge rates must also be controlled to prevent erosion in the discharge channel.

c. For disturbed areas less than five (5) acres, sedimentation basins are encouraged, but not required, unless required by the City Engineer. The applicant shall install erosion and sediment controls at locations directed by the City. Minimum requirements include silt fences, rock check dams, or other equivalent control measures along slopes. Silt fences are required along channel edges to reduce the amount of sediment reaching the channel. Silt fences, rock check dams, etc. must be regularly inspected and maintained.

7) Sediment basins related to impervious surface area. Where a project's ultimate development replaces surface vegetation with one (1) or more acres of cumulative impervious surface, and all runoff has not been accounted for in a local unit of government's existing storm water management plan or practice, the runoff must be discharged to a wet sedimentation basin prior to entering waters of the State. At a minimum, the work shall conform with the current version of the Minnesota Pollution Control Agency's publication "Protecting Water Quality in Urban Areas" and the current requirements found in the same agency's NPDESSISDS permits for storm water associated with construction activities.

8) Generally, sufficient silt fence buried at least six (6) inches into the soil shall be required to hold all sheet flow runoff generated at an individual site, until it can either infiltrate or seep through silt fence pores.

9) Temporary stockpiling of fifty (50) or more cubic yards of excess soil on any lot or other vacant area shall not be allowed without issuance of a grading permit for the earth moving activity in question.

10) For soil stockpiles greater than ten (10) cubic yards, the toe of the pile must be more than twenty-five (25) feet from a road, drainage channel or storm water inlet. If such stockpiles will be left for more than seven (7) days, they must be stabilized with mulch, vegetation, tarps, silt fences or other means. If left for less than seven (7) days, erosion from stockpiles must be controlled with silt fences or rock check dams.

   a. If for any reason a soil or non-soil stock pile of any size is located closer than twenty-five (25) feet from a road, drainage channel or storm water inlet, and will be left for more than seven (7) days, it must be covered with tarps or controlled in some other manner.

   b. All non-soil (clean sand, gravel, concrete or bituminous) must at a minimum have silt fencing or other effective sediment control measures installed.

11) All sand, gravel or other mining operations taking place on the development site shall apply for a Minnesota Pollution Control Agency National Pollutant Discharge Elimination System General Storm Water Permit for industrial activities and all required Minnesota Department of Natural Resources permits.

12) Driveways must be installed on all construction sites within twenty-four (24) hours of back filling. Driveways shall be constructed with a minimum depth of six (6) inches of crushed rock and a minimum width of eighteen (18) feet. Driveways shall extend from the curb to the structure. City

staff may authorize other materials that would provide the same access to the structure. If the driveway is not installed within the time period provided, a stop work order will be issued until the driveway is installed.

13) Construction dumpsters shall not be located on any surface other than the street or driveways.

14) Streets must be cleaned and swept within twenty four (24) hours whenever tracking of sediments occurs and before the site is left idle for weekends and holidays. A regular sweeping schedule should be established. Each violation of this requirement may result in the issuance of ticket by City police.

15) Water (impacted by the construction activity) removed from the site by pumping must be treated to remove eighty (80) percent of suspended soils before discharge by temporary sedimentation basins, geotextile filters, grit chambers, sand filters, up-flow chambers, hydro-cyclones, swirl concentrators or other appropriate controls. Such water shall not be discharged in a manner that causes erosion or flooding of the site, receiving channels, adjacent property or a wetland.

16) All storm drain inlets must be protected during construction until control measures are in place with either silt fence or an equivalent barrier that meets accepted design criteria, standards and specifications as contained in the latest version of the Minnesota Pollution Control Agency's publication "Protecting Water Quality in Urban Areas" and the most current version of the "Minnesota Storm Water Manual."

17) Slopes exceeding thirty-five (35) percent and land within twenty (20) feet of slopes exceeding thirty-five (35) percent shall be left in a natural and undisturbed state.

18) Roof drain leaders. All newly constructed and reconstructed buildings must route roof drain leaders to pervious areas (not natural wetlands) where the runoff can infiltrate. The discharge rate shall be controlled so that no erosion occurs in the pervious areas.

19) Removal from the project's site of more than one (1) acre of topsoil shall not be done, unless written permission is given by the City Engineer. Excessive removal of topsoil from the project's site can cause significant current and future soil erosion problems.

20) Inspection and Maintenance. All storm water pollution control management facilities must be designed to minimize the need of maintenance, to provide easy vehicle (typically eight [8] feet or wider) and personnel access for maintenance purposes and be structurally sound. These facilities must have a plan of operation and maintenance that ensures continued effective removal of the pollutants carried in storm water runoff. The City or its designated representative shall inspect all storm water management facilities during construction, during the first year of operation and at least once every year thereafter. The City will keep all inspection records on file for a period of five (5) years.

a. Inspection and Maintenance Easements. It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the storm water management facilities for inspection and maintenance purpose.

b. Inspection shall include the following:

I. Annual inspection of all structural pollution control devices, such as trap manholes, grit chambers, sumps, floatable skimmers and traps, separators, other small settling or filtering devices, all exposed stockpiles, and storage material handling areas.

II. Twenty (20) percent of the MS4 Outfalls, sediment basins and ponds each year on a rotating basis, during the effective period of the permit.

III. Based on inspection, determine if repair, replacement or maintenance measures are

necessary for proper operation and to prevent environmental impacts such as erosion.

IV. Record keeping of inspection results, including as appropriate the date, antecedent weather conditions, sediment storage and capacity remaining, and any maintenance performed or recommended. After two years of inspections, if patterns of maintenance become apparent, the frequency of inspections may be adjusted.

V. Annual report summarizing the results of all inspections.

21) Follow up inspections must be performed by the City on a regular basis to ensure that erosion and sediment control measures are properly installed and maintained. In all cases, the inspectors will attempt to work with the applicant and/or builder to maintain proper erosion and sediment control at all sites.

a. In cases where cooperation is withheld, construction stop orders may be issued by the City, until all erosion and sediment control measures meet specifications. A second erosion and sediment control/grading inspection must then be scheduled and passed before the final inspection will be done.

22) All infiltration areas must be inspected to ensure that sediment from ongoing construction activities is not reaching infiltration areas, and that these areas are also being protected from soil compaction from the movement of construction equipment.

J. Permanent Storm Water Pollution Controls.

1) The applicant shall install, construct, or pay the City fees for all permanent storm water management facilities necessary to manage increased runoff, so that the discharge rates from storm water treatment basins, such that the pre-development twenty-four (24) hour, two (2) year, ten (10) year, and one hundred (100) year peak storm discharge rates are not increased. These pre-development rates shall be based on the last ten (10) years of how that land was used.

Accelerated channel erosion must not occur as a result of the proposed land disturbing or development activity. An applicant may also make an in-kind or a 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 (1) or more persons, including the applicant.

a. All calculations and information used in determining these peak storm discharge rates shall be submitted along with the storm water pollution control plan.

2) The applicant shall consider reducing the need for permanent storm water management facilities by incorporating the use of natural topography and land cover such as natural swales and depressions as they exist before development to the degree that they can accommodate the additional flow of treated (e.g., settled) water without compromising the integrity or quality of the wetland or pond.

3) The following permanent storm water management practices must be investigated in developing the storm water management part of the storm water pollution control plan in the following descending order of preference:

a. Protect and preserve as much natural or vegetated area on the site as possible, minimizing impervious surfaces. Direct runoff to vegetated areas rather than to adjoining streets, storm sewers or ditches.

b. Flow attenuation of treated storm water by the use of open vegetated swales and natural depressions.

c. Storm water wet detention facilities (including percolation facilities).

d. A combination of successive practices may be used to achieve the applicable minimum control requirements specified in Section 12.185.I.3 (above) of this Ordinance. The applicant shall provide justification for the method selected.

K. Minimum Design Standards for Storm Water Wet Detention Facilities. At a minimum, these facilities must conform to the most current technology as reflected in the current version of the Minnesota Pollution Control Agency's publication "Protecting Water Quality in Urban Areas" and the most current version of the "Minnesota Storm Water Manual", and the current requirements found in the same agency's NPDES permits for storm water associated with construction activities.

L. Models/Methodologies/Computations. Hydrologic models and design methodologies used for determining runoff characteristics and analyzing storm water management structures must be approved by the City Engineer. Plans, specifications and computations for storm water management facilities submitted for review must be sealed and signed by a registered professional engineer. All computations must appear in the plans submitted for review, unless otherwise approved by the City Engineer.

M. Shoreland Protection. All land disturbing activities shall be subject to the applicable standards and requirements found in Section 12.24 of the City Code entitled "Shoreland Management District."

N. Floodplain Protection. All land disturbing activities shall be subject to the applicable standards and requirements found in Ordinance No. 282 of the City Code entitled "La Crescent District Floodplain Management Ordinance."

O. Engineered Grading Standards. All land disturbing activities shall be subject to the applicable standards and requirements found in Appendix A of Ordinance 421.

5. Review. The City Engineer shall review all multi-lot storm water pollution and erosion control and grading plans. This review must be completed no later than fourteen (14) days of receiving the plan from the applicant. City staff shall review single lot storm water pollution and erosion control and grading plans. City staff may refer such plans to the City Engineer.

A. Permit Required. If the City determines that the storm water pollution and erosion control and grading plans meet the requirements of this Ordinance, the City shall issue a grading permit valid for a specified period of time that authorizes the land

disturbance activity contingent on the implementation and completion of the storm water pollution control plan and contingent on completion of all items in the approved grading plan.

B. Permit Denial. If the City determines that the storm water pollution and erosion control and grading plans do not meet the requirements of this Ordinance, the City shall not issue a grading permit for the land disturbance activity.

1) All land use and building permits for the site in question must be suspended until the applicant has approved storm water pollution and erosion control and grading plans.

C. Permit Suspension and Revocation. If the storm water pollution and erosion control and grading plans are not being implemented, the City can suspend or revoke the grading permit authorizing the land disturbance activity.

6. Modification of Plan. An approved storm water pollution and erosion control and grading plan may be modified in accordance with the following:

A. Written application for modification must be received by the City. In reviewing such an application, the City Engineer may require additional reports and data.

B. Written approval of modifications must be approved by the MPCA Commission in accordance with the procedures of Minn. R. Ch. 7001. However, the City of La Crescent may modify without MPCA Commission approval provided that a BMP is added and none subtracted from the above plan or a less effective BMP is identified and is replaced with a more effective BMP. The alternative BMP should address the same or similar concerns as the ineffective or failed BMP. The MPCA Commissioner must be notified in the annual report of the modifications.

C. Records Retention. The City shall retain the written records of such modifications for at least three (3) years.

7. Maintenance Agreement.

A. Maintenance Agreement Required. A maintenance agreement may be required for storm water management, sediment control, and

erosion control practices between the City of La Crescent and a responsible party. The agreement shall provide for maintenance of approved storm water, sediment control, and erosion control practices during construction and until the entire site has reached final stabilization, which may extend beyond the duration period of any permits for land disturbing activities issued by the City. The maintenance agreement shall be filed with the County Register of Deeds as a property deed restriction so that it is binding upon all subsequent owners of the land served by the storm water management, sediment control and erosion control practices.

B. Maintenance Agreement Content. The maintenance agreement shall contain the following information and provisions and be consistent with the approved site control plan:

1) Identification of the storm water, sediment control, and erosion control facilities and designation of the drainage area served by the facilities.

2) A schedule for regular maintenance of each aspect of the storm sewer management, sediment control, and erosion control systems consistent with the approved site control plan.

3) Identification of the responsible party(s), organization or city, county, or town responsible for long term maintenance of the storm water management, sediment control, and erosion control practices identified in the approved site control plan.

4) Requirement that the responsible party(s), organization, or city, county, or town shall maintain storm water management, sediment control, and erosion control practices in accordance with the schedule included in Section 12.185.7.B.2 of this Ordinance.

5) Authorization for the City of La Crescent to access the property to conduct inspections of storm water management, sediment control, and erosion control practices as necessary to ascertain that the practices are being maintained and operated in accordance with the agreement.

6) The City of La Crescent shall maintain public records of the

results of the site inspections, inform the responsible party responsible for maintenance of the inspection results, and to specifically indicate any corrective actions required to bring the storm water management, sediment control, and erosion control practices into proper working condition.

7) Agreement that the party designated under Section 12.185.7.B.3 of this Ordinance, as responsible for long term maintenance of the storm water management, sediment control, and erosion practices shall be notified by the City of La Crescent of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the City of La Crescent.

8) Authorization of the City of La Crescent to perform the corrected actions identified in the inspection report if the responsible party designated under Section 12.185.7.B.3 of this Ordinance does not make the required corrections in the specified time period. The City of La Crescent shall enter the amount due on the tax rolls and collect the money as a special assessment against the property pursuant to Minnesota State Statutes.

9) There shall be a statement obligating the developer to grant a deed for the pond outlot(s) to the City after final stabilization of the site has been approved by the City in the development agreement.

8. Financial Security.

A. Amount of Financial Security.

1) Multi-Lot Developers. The applicant shall provide a financial security for the performance of the work described and delineated on the approved storm water pollution and erosion control and grading plans and any storm water pollution and erosion control and grading plan related remedial work at a rate of three thousand dollars ($3,000) per acre for the maximum acreage of soil that will be simultaneously exposed to erosion during the project's construction. (See the definitions of "exposed soil area" and "final stabilization" for clarification.) This security must be

available prior to commencing the project.

2) Single Lot Builders. Where individual lots are sold to a builder that is different from the developer, additional financial security for the performance of the work described and delineated on the approved grading plan for the lot(s) in question must be submitted by the builder. The amount of the financial security shall be determined as follows:

Over 1 acre	$3,000
From ¾ to 1 acre	$2,000
From ½ to ¾ acre	$1,500
From ¼ to ½ acre	$1,000
From ⅛ to ¼ acre	$750
Less than ⅛ acre	$500

This deposit will be for the maximum area that will be simultaneously exposed to erosion during the construction on the lot in question. (See the definitions of "exposed soil area" and "final stabilization" for clarification.) This security must be available prior to commencing the project.

3) The City may request a greater financial security, if the City considers that the development site is especially prone to erosion, or the resource to be protected is especially valuable.

4) If more soil is simultaneously exposed to erosion than originally planned, the amount of the security shall increase in relation to this additional exposure.

B. Form of Financial Security. The form of the security must be money, certified bank check, an irrevocable letter of credit, negotiable bonds of the kind approved for securing deposits of public money or other instruments of credit from one (1) or more financial institutions, subject to regulation by the State and Federal government wherein said financial institution pledges that the funds are on deposit and guaranteed for payment. This security shall save the City free and harmless from all suits or claims for damages resulting from the negligent grading, removal, placement of storage of rock, sand, gravel, soil or other like material within the City. The type of security must be of a type acceptable to the City.

C. Maintaining the Financial Security. If at any time during the course of the work, this amount falls below fifty (50) percent of the required deposit, the applicant shall make another deposit in the amount necessary to restore the deposit to the required amount within ten (10) days. Otherwise the City may:

1) Withhold the scheduling of inspections and/or the issuance of a Certificate of Occupancy.

2) Revoke any permit issued by the City to the applicant for the site in questions.

D. Proportional Reduction of the Financial Security. On projects where the initial required financial security exceeds ten thousand dollars ($10,000), the City can reduce the total required amount of the financial security by one-third (1/3), when more than one-third (1/3) of the applicant's maximum exposed soil area achieves final stabilization, if recommended in writing by the City Engineer. When more than two-thirds (2/3) of the applicant's maximum exposed soil area achieves final stabilization, the City can reduce the total required amount of the financial security to two-thirds (2/3) of the initial amount, if recommended in writing by the City Engineer.

E. Action Against the Financial Security. The City may act against the financial security, if any of the conditions listed below exist. The City shall use funds from this security to finance any corrective or remedial work undertaken by the City or a contractor under contract to the City and to reimburse the City for all direct cost incurred in the process of remedial work including, but not limited to, staff time and attorney's fees.

1) The applicant ceases land disturbing activities and/or filling and abandons the work site prior to completion of the City approved grading plan.

2) The applicant fails to conform to any City approved grading plan and/or the storm water pollution control plan as approved by the City, or related supplementary instructions.

3) The techniques utilized under the storm water pollution control plan fail within one (1) year of installation.

4) The applicant fails to reimburse the City for corrective action taken under Section 8.

5) Emergency action under either part 7.4 or any part of Section 8.

F. Emergency Action. If circumstances exist such that non-compliance with this Ordinance poses an immediate danger to the public health, safety and welfare, as determined by the City Engineer, the City may take emergency preventative action. The City shall also take every reasonable action possible to contact and direct the applicant to take any necessary action. Any cost to the City may be recovered from the applicant's financial security.

G. Returning the Financial Security: Any unspent amount of the financial security deposited with the City for faithful performance of the storm water pollution control plan and any storm water and pollution control plan related remedial work must be released not more than one (1) full year after the completion of the installation of all such measures, the establishment of final stabilization, and the issuance of a Certificate of Occupancy.

9. Enforcement.

A. Notification by the City. The City shall notify the party or parties listed on the application and/or the storm water pollution control and grading plans as contacts when there is a violation of the provisions of this Title or when there is a failure of the storm water pollution and erosion control measures. Except during an emergency action under Section 8.0F twenty-four (24) hours after notification by the City of forty-eight (48) hours after the failure of erosion control measures, whichever is less, the City at its discretion, may begin corrective work. Such notification should be in writing, but if it is verbal, a written notification should follow as quickly as practical. If after making a good faith effort to notify the responsible party or parties, the City has been unable to establish contact, the City may proceed with the corrective work.

1) There are conditions when time is of the essence in controlling erosion. During such a condition, the City may take immediate action, and then notify the applicant as soon as possible.

B. Erosion Off Site. If erosion breaches the perimeter of the site, the applicant shall immediately develop a clean up and restoration plan, obtain the right-of-entry from the adjoining property owner, and implement the clean up and restoration plan within twenty-four (24) hours. 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 and charge the cost to the applicant.

C. 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, prevention strategies, clean up and repair must be immediate. The applicant shall provide all traffic control and flagging required to protect the traveling public during the clean up operations.

D. Failure to Do Corrective Work. When an applicant fails to conform to any provision of this Section 9 within the time stipulated, the City may take the following actions:

1) Withhold the issuance of building permits, scheduling of inspections and/or the issuance of a Certificate of Occupancy.

2) Suspend or revoke any permit issued by the City to the applicant for the site in question.

3) Direct the correction of the deficiency by City forces or by a separate contract. The issuance of a permit for land disturbance activity constitutes a right-of-entry for the City or its contractor to enter upon the construction site for the purpose of correcting erosion control deficiencies.

4) All costs incurred by the City in correcting storm water pollution control deficiencies must be reimbursed by the applicant. If payment is not made within thirty (30) days after costs are incurred by the City, payment will be made from the applicant's financial securities as described in Section 7.

5) If there is an insufficient financial amount in the applicant's financial securities as described in Section 7, to cover the costs incurred by the City, then the City may assess the remaining amount against the property. As a condition of the permit for land disturbance activities, 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 Minnesota Statute 429.081 to challenge the amount or validity of the assessment.

6) Any person, firm, or corporation failing to comply with or violating any of these regulations, shall be deemed guilty of a misdemeanor and be subject to a fine or imprisonment or both. Each day that a separate violation exists shall constitute a separate offense.

10. Variance. In any case where, upon application of the responsible person or persons, the City finds that by reason of exceptional circumstances, strict conformity with this Ordinance would be unreasonable, impractical, or not feasible under the circumstances; the City in its discretion may grant a variance in accordance with the criteria and procedures founding Section 12.08 of this Chapter. The variance must be specific, and must not affect other approved provisions of the storm water pollution and erosion control plan.

The following must be shown by the applicant:

A. Variance request shall be in writing and include the reason for requesting the variance

B. Economic hardship is not sufficient reason for granting a variance and,

C. The City shall respond to the variance request in writing and include justification for granting or denying the request.

11. Right-of-Entry and Inspection.

A. Powers. The applicant shall promptly allow the City and their authorized representatives, upon presentation of credentials, to:

1) Enter upon the permitted site for the purpose of obtaining information, examination of records, conducting investigations, inspections or surveys.

2) Bring such equipment upon the permitted site as is necessary to conduct such surveys and investigations.

3) Examine and copy any books, papers, records, or memoranda pertaining to activities or records required to be kept under the terms and conditions of this permitted site.

4) Inspect the storm water pollution control measures.

5) Sample and monitor any items or activities pertaining to storm water pollution control measures.

6) Any temporary or permanent obstruction to the safe and easy access of such an inspection shall be promptly removed upon the inspector's request. The cost of providing such access shall be borne by the applicant.

12. Abrogation and Greater Restrictions. It is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Ordinance imposes greater restrictions, the provisions of this Ordinance shall prevail. All other ordinances inconsistent with this Ordinance are hereby repealed to the extent of the inconsistency only.

13. Severability. The provisions of this Ordinance are severable, and if any provisions of this Ordinance, or application of any provision of this Ordinance to any circumstance, if held invalid, the applicant of such provision to other circumstances, and the remainder of this Ordinance must not be affected thereby.

SECTION III. Chapter 15 of the La Crescent City Code is hereby amended consistent with the provisions of this ordinance, repealing the provisions thereof inconsistent herewith.

These provisions shall become effective from and after due passage and enactment and publication, according to law.

ADOPTED this 9th day of February 2009.

SIGNED:

/s/ Mikel Poellinger

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Mayor

ATTEST:

/s/ Phyllis Feiock

Deputy Clerk