

**City of Medicine Lake**

**Ordinance No. 108**

**AN ORDINANCE AMENDING SECTION 200 OF EXISTING ORDINANCE NO. 70 (ZONING REGULATIONS) AND INSERTING SECTION 1700 AS IT RELATES TO STORM WATER POLLUTION AND EROSION CONTROL**

The City Council of the City of Medicine Lake does ordain as follows:

**Section 1:** Ordinance 70, Section 200.2, Definitions, is amended by adding the following new definitions, modifying existing definitions, and renumbering accordingly:

Applicant: The owner, their agent or person having legal control of, ownership and/or interest in land which the provisions of this Chapter are being considered for or reviewed, including permits, variances, amendments or appeals. The term "applicant" also includes agents, employees and others acting under the direction of the entity having legal control of, ownership and/or interest in said land.

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.

Buffer Strip: A protective vegetated strip 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. This start point corresponds to the Minnesota Department of Natural Resources' definition of a "shoreline" in Minnesota Rules 6115.0030. Acceptable buffer vegetation includes preserving existing pre-development vegetation and/or planting locally distributed native Minnesota trees, shrubs and grassy vegetation.

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

Developer: Any person, group, firm, corporation, sole proprietorship, partnership, state agency, or political subdivision thereof engaged in development of land.

Development: All structures, land uses, land disturbance activities, and other modifications of the existing landscape above and below ground or water, on a single parcel, or on more than one parcel If covered by a single PUD or conditional use permit.

Discharge: The release, conveyance, channeling, runoff, or drainage of storm water, including snowmelt, from a development site.

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: Methods employed to prevent erosion, such as soil stabilization practices, horizontal slope grading, temporary or permanent cover, and construction phasing.

Exposed Soil Areas: All areas of the development site where the vegetation (trees, shrubs, brush, grasses, etc.) or impervious surface have been removed, thus rendering the soil more prone to erosion. This includes topsoil stockpile areas, which are 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 from adjacent impervious surface areas. 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 disturbance activities at the site have been completed and 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.

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 (large enough to be observed by the naked eye) 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.

Illicit Discharge: Any direct or indirect non-storm water discharge to the storm drain system, except as exempted in Section 1700.3 of this ordinance.

Illicit Connection: An illicit connection is defined as either of the following:

- Any drain or conveyance, whether on the surface or subsurface that allows an illegal discharge to enter the storm drain system including but not limited to any conveyances that allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency or,
- Any drain or conveyance connected from a commercial or industrial land use to the storm drain system that has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Impervious Surface: A surface that has been compacted or covered with a layer of material that either prevents or retards infiltration of water into the soil, causing water to run off the surface in greater quantities and at a faster rate of flow than existed prior to development. It includes surfaces such as compacted sand, limerock or clay, as well as most conventionally surfaced streets, rooftops, sidewalks, parking lots, driveways, patios, and storage areas.

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

- A.) Minor land disturbance activities such as home gardens and an individual's home landscaping, repairs, and maintenance work.
- B.) Additions or modifications to existing single-family structures, which result in increasing less than one thousand (1,000) square feet of exposed soil or impervious surface and/or is part of a larger "common plan of development or sale".
- C.) Construction, installation, and maintenance of fences, signs, posts, poles, and electric, telephone, cable television, utility lines or individual service connections to these utilities, which result in creating less than one thousand (1,000) square feet of exposed soil or impervious surface.
- D.) Emergency work to protect life, limb, or property and emergency repairs, unless the land disturbing activity would have otherwise required an approved Soil Erosion 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.

Municipal Separate Storm Sewer System (MS4): The system of conveyances (including sidewalks, roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned and operated by the City and designed or used for collecting or conveying storm water, and that is not used for collecting or conveying sewage.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit: A permit issued by EPA (or by a State under authority delegated pursuant to US Code, Title 33, Section 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

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, which were not introduced as a result of European settlement or subsequent human introduction.

Non-Storm Water Discharge: Any discharge to the storm water system that is not composed entirely of storm water.

Permanent Cover: Long-term methods employed to prevent erosion and achieve “final stabilization”, such as grass, gravel, asphalt, and concrete.

Permit: Within the context of this ordinance, a “permit” is a written warrant or license granted for construction, zoning approval, subdivision approval, or to allow land disturbance activities.

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, ice or gravity, 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.

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

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

Steep Slope: Any slope steeper than fifteen (15) percent (Fifteen (15) feet of rise for every one hundred (100) feet of 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 runoff 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 1700.3, that when implemented will decrease soil erosion on a parcel of land and off-site nonpoint pollution. It involves both temporary and permanent controls.

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.”

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

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. (*Commentary: Storm water controls using infiltration need protection against silt plugging, such as settling basins and manhole silt sumps. Otherwise silt plugging can result in failure rates as high as 80-90% in only five years.*)

Very Steep Slope: Any slope steeper than one foot of rise for each three feet of horizontal run (Thirty-three (33) percent slope).

Waters of the State: As defined in Minnesota Statutes section 115.01, subdivision 22 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.”

Wet Detention or Retention Facility: A permanent man-made structure containing a permanent pool of water that is used for the temporary storage of storm water runoff.

**Section 2:** Ordinance 70, Section 1700 (Reserved) is added as follows:

**1700.1 Purpose.** The purpose of this ordinance is to control or prevent storm water pollution along with soil erosion and sedimentation within the City, including non-storm water discharges/connections to the municipal storm water system to the maximum extent practicable as required by federal and state law. It establishes standards and specifications for storm water conservation practices, planning activities and discharge/connection prohibitions, which minimize storm water pollution, soil erosion and sedimentation. This ordinance also establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process.

**1700.2 Scope.** Except where a variance is granted, any person, group, firm, sole proprietorship, partnership, corporation, state agency, or political subdivision proposing a land disturbance activity that involves more than 200 cubic yards of cut or fill or disturbs more than 10,000 square feet on any property within the City shall apply to the City for the approval of a Storm Water Pollution Control Plan (SWPCP). No land shall be disturbed until a SWPCP is approved by the City and conforms to the standards set forth herein. This ordinance also applies to all water discharged/connected to the storm water system that is generated on any developed and undeveloped lands unless explicitly exempted by the City as described in Section 1700.3.

**1700.3 Prohibition of Illicit Discharges.** Prohibition of illicit discharges. No person shall throw, drain, or otherwise discharge, cause, or allow others under its control to throw, drain, or otherwise discharge into the MS4 any pollutants or waters containing any pollutants, other than storm water. The commencement, conduct or continuance of any illicit discharge to the storm water system is prohibited except as described as follows:

- (a) The following discharges are exempt from discharge prohibitions established by this ordinance: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water.
- (b) Discharges or flow from firefighting, and other discharges specified in writing by the City as being necessary to protect public health and safety.

(c) Discharges associated with dye testing; however this activity requires a verbal notification to the City prior to the time of the test. The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the U.S. Environmental Protection Agency (EPA), provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm water system.

**1700.4 Notification of Pollutants Discharged into Storm Water.**

Notwithstanding other requirements of the law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drainage system, or waters of the United States, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the City no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Failure to provide notification of a release as provided above is a violation of this ordinance.

**1700.5 Storm Water Pollution Control Plan.** Every applicant for a building permit or permit to allow a land disturbance activity must submit a storm water pollution control plan to the City. No building permit or permit to allow a land disturbance activity shall be issued until the City approves this plan. At a minimum these pollution control practices must conform to those in the current version of the Minnesota Pollution Control Agency’s publication, “Protecting Water Quality in Urban Areas.”

(a) General Policy on Storm Water Runoff Rates: Release rates from storm water treatment basins shall not increase over the predevelopment twenty-four (24) hour two (2) year, ten (10) year and one hundred (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.

(b) The Storm Water Pollution Control Plan and the Grading Plan: The storm water pollution control plan’s mechanisms, the limit of disturbed

surface, 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.

(c) Inspections of the Storm Water Pollution Control Plan's Mechanisms: Inspections shall be done weekly by 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 0.25 inches or more in twenty-four (24) hours). At a minimum, these inspections shall be done during active construction.

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

1. The name and address of the applicant and the location of the activity.
2. Project description including the nature and purpose of the land disturbance activity and the amount of grading, utilities, and building construction involved.
3. Phasing of construction including time frames and schedules for the project's various aspects.
4. A map of the existing site conditions including existing topography, property information, steep and very steep slopes, existing drainage systems/patterns, type of soils, waterways, wetlands, vegetative cover, one hundred (100) year flood plain boundaries, locations of existing and future buffer strips.
5. A site plan that includes the location of the proposed land disturbance activity, stockpile locations, erosion and sediment control plan, construction schedule, and the plan for the maintenance and inspections of the storm water pollution control measures.
6. A site plan showing adjacent areas that might be affected by the land disturbance activity including neighboring streams, lakes, wetlands, flood plain, residential areas, roads, etc.
7. Designate the site's areas that have the potential for serious erosion problems.
8. Erosion and sediment control mechanisms that will be used to control erosion and sedimentation on the site, both during and after the construction process.
9. Describe how the site will be stabilized after construction is completed, including specifications, time frames or schedules.
10. Calculations: any that were made for the design of such items as sediment basins, wet detention basins, diversions, waterways, infiltration zones and other applicable practices.

(e) General Storm Water Pollution Control Plan Criteria. The plan shall

address the following:

1. Stabilizing all exposed soils and soil stockpiles and the related time frame or schedule.
2. Establishing permanent vegetation and the related time frame or schedule.
3. Preventing sediment damage to adjacent properties and sensitive natural areas such as streams, wetlands, lakes and natural vegetation.
4. Scheduling for erosion and sediment control practices.
5. Where permanent and temporary sedimentation basins will be located.
6. Engineering the construction and stabilization of steep and very steep slopes.
7. Measures for controlling the quality and quantity of storm water leaving a site.
8. Stabilizing all waterways and outlets.
9. Protecting storm sewers from the entrance of sediment.
10. What precautions will be taken to contain sediment, when working in or crossing water bodies.
11. Restabilizing utility construction areas as soon as possible.
12. Protecting paved roads from sediment and mud brought in from access routes.
13. The eventual discontinuation of temporary erosion and sediment control mechanisms.
14. How the temporary and permanent erosion and sediment controls will be maintained.
15. The disposal of collected sediment and floating debris.

(f) **Minimum Storm Water Pollution Control Mechanisms and Related Inspections:** These minimum control mechanisms are required where bare soil is exposed. Due to the diversity of individual construction sites, each site will be individually evaluated. Where additional control mechanisms are needed, they will be specified at the discretion of the City. The City will determine what actions are necessary.

1. All grading plans and building site surveys must be reviewed by the City for the effectiveness of erosion and sediment control mechanisms in the context of site topography and drainage.
2. Erosion and sediment control mechanisms must be properly installed by the developer before construction activity begins. Such mechanisms 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 mechanisms must be returned to the configuration specified by the City. A sediment control inspection must then be scheduled, and passed 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 pollution control plan involves directing some or all of the site's runoff, the applicant or the applicant's 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 a and b or a and c):
  - (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 one hundred (100) feet of any water of the state, or within one hundred (100) 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 3:1 to 10:1 and twenty-one (21) days for slopes flatter than 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 to at least 1% of the area draining to basin, 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 one (1) acre sedimentation basins are encouraged, but not required, unless required by the City. 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 steep and very steep 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 to 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 NPDES/SDS permits for storm water associated with construction activities.

8. Generally, sufficient silt fence shall be required to hold all sheet flow runoff generated at an individual site, until it can either infiltrate or seep through silt fence's pores.
9. Temporary stockpiling of ten (10) or more cubic yards of excess soil on any lot or other vacant area shall not be allowed without issuance of a grading/excavating permit for the land disturbance 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 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 stockpile 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 mechanisms 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 (NPDES) General Storm Water permit for industrial activities and all required Minnesota Department of Natural Resources permits.
12. Temporary rock construction entrances, or equally effective means of preventing vehicles from tracking sediment from the site, may be required wherever vehicles enter and exit a site. Vehicle tracking of sediment from the site must be minimized by BMPs such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping must be used if such BMPs are not adequate.
13. Parking is prohibited on all bare lots and all temporary construction entrances, except where street parking is not available. Gravel entrances are to be used for deliveries only as per the development contract.
14. Streets must be cleaned and swept whenever tracking of sediments occurs and before the site is left idle for weekends and holidays. A

regular sweeping schedule should be established.

15. Water (impacted by the construction activity) removed from the site by pumping must be treated 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. Catch basins. All newly installed and rehabilitated catch basins must be provided with a sump area for collecting coarse-grained material. Such basins must be cleaned when they are half filled with material.
17. 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 pervious areas.
18. 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. Excessive removal of topsoil from the project's site can cause significant current and future soil erosion problems.
19. Inspection and maintenance. All storm water management facilities must be designed to minimize the need of maintenance, to provide easy vehicle 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 three (3) years thereafter. The City will keep all inspection records on file for a period of three (3) years. 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.
20. 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. 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.
21. All infiltration areas must be inspected to ensure that sediment from ongoing construction activity is not reaching infiltration

areas, and that these areas are also being protected from soil compaction from the movement of construction equipment.

(g) Permanent Storm Water Pollution Controls Mechanisms.

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 predevelopment twenty-four (24) hour two (2) year, ten (10) year, and one hundred (100) year peak storm discharge rates are not increased. These predevelopment 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 disturbance 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 disturbance and development activities undertaken by one or more persons, including the applicant. 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 and 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); and
  - d. A combination of successive practices may be used to achieve the applicable minimum control requirements specified in subsection (f) above. The applicant shall provide justification for the method selected.

(h) 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 current requirements found in the same agency's NPDES permits for storm water associated with construction activities.

(i) Minimum Protection for Natural Wetlands.

1. Runoff must not be discharged directly into wetlands without appropriate quality and quantity runoff control, depending on the individual wetland's vegetation sensitivity.
2. Wetlands must not be drained or filled, wholly or partially, unless replaced by either restoring or creating wetland areas of at least equal public value. Compensation, including the replacement ratio and quality of replacement should be consistent with the requirements outlined in the Board of Water and Soil Resources rules that implement the Minnesota Wetland Conservation Act of 1991 including any and all amendments to it.
3. Work in and around wetlands must be guided by the following principles in descending order of priority:
  - a. Avoid both the direct and indirect impact of the activity that may destroy or diminish the wetland.
  - b. Minimize the impact by limiting the degree or magnitude of the wetland related activity.
  - c. Rectify the impact by repairing, rehabilitating, or restoring the affected wetland environment with one of at least equal public value.
  - d. Reduce or eliminate the adverse impact over time by preservation and maintenance operations during the life of the activity.

(j) Minimum Vegetated Buffer Protection for Rivers, Streams and Wetlands.

1. At a minimum, a vegetated buffer strip on each bank the width of one hundred (100) feet (forty (40) feet for most wetlands) for rivers, streams and outstanding resource value wetlands, shall be provided. If possible, such a buffer strip shall consist of predevelopment native vegetation. Ideally for rivers or streams, a shade tree canopy in the part of the buffer zone closest to the stream channel should be established. Buffer width shall be increased at least two (2) feet (four (4) feet for all wetlands) for every one (1) percent of slope of the surrounding land. Natural wetlands adjacent to rivers and streams are not counted as buffer strips. They are considered a natural resource worthy of protection in their own right. Therefore the widths of natural wetlands are not counted as part of the river or stream's buffer strip. Such wetlands rate their own forty-foot (40) plus vegetated buffer strip.
  - a. Detailed buffer design is usually site specific. Therefore

- the City can require a larger buffer than the minimum.
- b. For newly constructed buffer sites the design criteria should follow common principles and the example of nearby natural areas. The site should be examined for existing buffer zones and mimic that slope structure and vegetation as much as possible. Buffer design and protection during construction should do any or all of the following: slow water runoff, trap sediment, enhance water infiltration, trap fertilizers, pesticides, pathogens, heavy metals, trap blowing snow and soil, and act as corridors for wildlife. How much stress is put on these functions will determine the buffer zone's final configuration.
  - c. The applicant or a designated representative shall maintain the buffer strip for the first year. After that the City, or a party designated by the City, shall maintain the buffer strip.
  - d. Buffer strips can be made into perpetual conservation easements.
  - e. Buffer strips shall be marked as such with permanent markers. . :
  - f. The City may allow buffer area averaging in cases where averaging will provide additional protection to either the resource or environmentally valuable adjacent upland habitat, provided that the resource's total buffer area remains the same. This means that some sections of the buffer will be wider than normal. Care should be taken in averaging so that the buffer's usefulness is not short-circuited.
2. Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.
  3. Watercourses used solely for drainage, such as roadside ditches, are exempt from this provision. Minnesota Pollution Control Agency Class 7 limited resource (Waters not protected for aquatic habitat or recreational use) value waters are also exempt from this provision, unless the Class 7 water is directly tributary to either a Minnesota Department of Natural Resources designated trout stream or a state designated Outstanding Resource Value Water.
  4. Minimal width public recreational and educational trails in

vegetated buffer strips are exempt from this provision provided that the buffer strip's width is increased by the width of the trail (i.e. A 10 foot wide trail in a 100 foot buffer strip increases the true width of the strip plus the trail to 110 feet.)

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

**1700.6 Review.** The City shall review the storm water pollution control plan. This review must be completed within seven (7) days of receiving the plan from the applicant.

(a) Permit Required. If the City determines that the storm water pollution control plan meets the requirements of this ordinance, the City shall issue a 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.

(b) Permit Denial. If the City determines that the storm water pollution control plan does not meet the requirements of this ordinance, the City shall not issue a 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 an approved storm water pollution control plan.

(c) Permit Suspension and Revocation. If the storm water pollution control plan is not being implemented the City can suspend or revoke the permit authorizing the land disturbance activity.

**1700.7 Modification of Plan.** An approved storm water pollution control plan may be modified on submission of a written application for modification to the City, and after written approval by the City. In reviewing such an application, the City may require additional reports and data.

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

**1700.8 Financial Securities.** The applicant shall provide a financial security for the performance of the work described and delineated on the approved grading plan involving the storm water pollution control plan and any storm water and pollution control plan related remedial work. This security must be available prior to commencing the project.

(a) Form of the Security. The form of the security must be one of the following:

(1) By cash security deposited to the City for thirty percent (30%) of the total financial security in Section 1700.6, when less than one (1) acres of soil will be simultaneously exposed. When over one (1) acres of soil will be simultaneously exposed to erosion, then the cash security increases to fifty percent (50%) of the total financial security in Section 1700.6.

(2) The remainder of the financial security shall be placed either with the City, a responsible escrow agent, or trust company, at the option of the City, money, an irrevocable letter of credit, negotiable bonds of the kind approved for securing deposits of public money or other instruments of credit from one 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 or 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.

(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) Maintaining the Financial Security. If at any time during the course of the work this amount falls below 50% of the required deposit, the applicant shall make another deposit in the amount necessary to restore the deposit to the required amount within two (2) 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 question and another of the applicant's sites within the City's jurisdiction.

(c) Proportional Reduction of the Financial Security. When more than one-third of the applicant's maximum exposed soil area achieves final stabilization, the City can reduce the total required amount of the financial security by one-third, if recommended in writing by the City. When more than two-thirds 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 of the initial amount, if recommended in writing by the City.

(d) 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 disturbance activities and/or filling and abandons the worksite 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 1700.7.
5. Emergency action under either part 1700.6 (e) or any part of Section 1700.7.

(e) Emergency Action. If circumstances exist such that noncompliance with this ordinance poses an immediate danger to the public health, safety and welfare, as determined by the City, 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.

(f) 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 and the

establishment of final stabilization.

**1700.9 Notification of Failure of the Storm Water Pollution Control Plan and/or NPDES Permit.** The City shall notify the applicant when the City is going to act on the financial securities part of this ordinance.

(a) Notification by the City. The initial contact will be to the party or parties listed on the application and/or the storm water pollution control plan as contacts. Except during an emergency action under Section 1700.6 (e), forty-eight (48) hours after notification by the City or seventy-two (72) 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 cleanup and restoration plan, obtain the right-of-entry from the adjoining property owner, and implement the cleanup and restoration plan within forty-eight (48) hours of obtaining the adjoining property owner's permission. In no case, unless written approval is received from the City, shall more than seven (7) 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 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, cleanup and repair must be immediate. The applicant shall provide all traffic control and flagging required to protect the traveling public during the cleanup operations.

(d) Failure to Do Corrective Work. When an applicant fails to conform to any provision of Sections 1700.6 or 1700.7 within the time stipulated, the City may take the following actions:

1. Withhold the 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 or any other of the applicant's sites within

the City's jurisdiction.

3. Direct the correction of the deficiency by City staff or by a separate contract. The issuance of a permit for land disturbance activity and/or NPDES 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 1700.6.
5. If there is an insufficient financial amount in the applicant's financial securities as described in Section 1700.6, 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.

**1700.10 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 there from upon such conditions as it may prescribe for prevention, control, or abatement of pollution in harmony with the general purposes of this ordinance. Variances shall be processed according to Section 500 Administration - Variances of Ordinance 70.

**1700.11 Enforcement.** The City shall be responsible for enforcing this ordinance.

- (a) Penalties. 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. All land use, building and NPDES permits shall be suspended until the applicant has corrected the violation. Each day that a separate violation exists shall constitute a separate offense.

**1700.12 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, and perform any additional duties as defined by state and federal law.
4. Inspect the storm water pollution control measures.
5. Sample and monitor any items or activities pertaining to storm water pollution control measures.
6. The City has the right to require the permitted site to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the facility at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.
1. 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 born by the applicant.
7. Unreasonable delays in allowing the City access to a permitted facility is a violation of a storm water permit and of this ordinance.

(b) Search Warrants. If the City has been refused access to any part of the premises from which storm water is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City may seek issuance of a search warrant from any court of competent jurisdiction.

**1700.13 Abrogation and Greater Restrictions.** This ordinance 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.

**1700.14 Severability.** The provisions of this ordinance are severable, and if any provision of this ordinance, or application of any provision of this ordinance to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this ordinance must not be affected thereby.

**1700.15 Effective Date.** This ordinance will take effect and be in force after its passage and official publication.

**Adopted by the City Council of the City of Medicine Lake this 9th day of January, 2012.**

Mary Anne Young, Mayor

ATTEST: Nancy Pauly, City Clerk