

ORDINANCE NO. 4817

AN ORDINANCE TO CREATE AND ENACT TITLE 14.1 OF THE CITY OF BISMARCK CODE OF ORDINANCES, RELATING TO STORMWATER MANAGEMENT.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA.

TITLE 14.1
STORMWATER MANAGEMENT

TABLE OF CONTENTS

14.1-01	General Provisions.
14.1-02	Stormwater Management Plan - Application
14.1-03	Stormwater Management Plan - Review
14.1-04	Stormwater Management Plan - Approval Standards
14.1-05	Stormwater Management - Permits
14.1-06	Enforcement.
14.1-07	Penalties.

CHAPTER 14.1-01

GENERAL PROVISIONS

14.1-01-01	Purpose and Policy
14.1-01-02	Definitions
14.1-01-03	Scope.

14.1-01-01 Purpose and Policy. This title sets forth uniform requirements for stormwater management systems within the City and its extraterritorial jurisdiction. It is the intent of the Board of City Commissioners that the requirements and standards contained in this ordinance comply with all applicable state and federal laws. In the event of any conflict between the provisions of this ordinance and the provisions of an erosion

control, shoreland protection, or floodplain ordinance, or other regulations adopted by the City, County, State or Federal authorities, the more restrictive standard prevails.

The objectives of this title are:

1. To promote, preserve, and enhance the natural resources within the City of Bismarck and its extraterritorial jurisdiction;
2. To protect and promote the health, safety, and welfare of the people and property through effective stormwater management practices;
3. To protect the City's natural resources from adverse impacts occasioned by development or other activities;
4. To regulate land development, land disturbing, or other activities that may have an adverse and potentially irreversible impact on water quality and environmentally sensitive lands;
5. To minimize conflicts and encourage compatibility between land disturbing and development activities and environmentally sensitive issues (i.e. land, water, habitat, etc.);
6. To require detailed review standards and procedures for land development activities proposed throughout the City, and its extraterritorial jurisdiction, thereby achieving a balance between urban growth and development, and the protection of water quality; and
7. To provide for adequate stormwater system analysis and appropriate stormwater system design as necessary to protect public and private property, water quality, and existing natural resources. This title establishes and provides for the following stormwater management criteria:
 - a) The regulation of development through the issuance of stormwater permits and through the enforcement of general stormwater drainage requirements throughout the City. It also authorizes monitoring and enforcement activities, and provides for the setting of applicable fees for the equitable distribution of costs associated with the administration of the stormwater management program established herein.
 - b) The regulation of, and the establishment of criteria for, public underground storm sewers, artificial and natural open channel drainage systems, stormwater detention and retention ponds, and private stormwater drainage systems discharging into the public system.

c) The regulation of development activities as they relate to managing stormwater volumes, rates of runoff, flow duration, and their subsequent impacts to downstream property and stormwater management facilities.

d) Provides for a stormwater management system user charge and the method for calculating charges for each user classification. Procedures for rate adjustments and annual review criteria are established.

e) Penalties for violating the provisions of this ordinance, and the orders, rules, regulations and permits issued hereunder.

f) Applies in the City of Bismarck, North Dakota, and its extraterritorial jurisdiction, and to persons outside the City who are, by contract or agreement with the City, users of the City stormwater management system. Except as otherwise provided herein, the City Engineer shall administer, implement, and enforce the provisions of this ordinance.

14.1-01-02. Definitions. For the purpose of this ordinance and title, the following terms, phrases, and words, and their derivatives, shall have the meaning as stated in this section. When inconsistent with the context, words used in the present tense include the future tense. Words in plural number include the singular number, and words in the singular number include the plural number. The word "shall" is always mandatory and the word "may" is always permissive.

Agricultural Land Use: The use of land for planting, growing, cultivating and harvesting crops for human or livestock consumption and pasturing or yarding of livestock.

Applicant: Any person wishing to obtain a building permit, special use permit, zoning or subdivision approval.

Base Flood: The flood having a one percent chance of being equaled or exceeded in any given year (i.e. 100-year flood). It is also referred to as the regional flood.

Board: The Board of City Commissioners of the City of Bismarck.

City: The City of Bismarck or the Board of City Commissioners of the City of Bismarck.

Control Measure: A practice or combination of practices to control erosion and attendant pollution.

Conveyance Structure: A pipe, open channel, or other facility that transports runoff from one location to another.

Detention Facility: A natural or manmade structure, including wetlands, for the temporary storage of runoff which may contain a pool of water, or may be dry during times of no runoff.

Development Properties: Lands and properties located within an approved stormwater management permit boundary.

Developer: A person, firm, corporation, sole proprietorship, partnership, federal or state agency, or political subdivision thereof engaged in a land disturbance and/or land development activity.

E.P.A.: United States Environmental Protection Agency.

Engineer: The City Engineer of the City of Bismarck or authorized agent.

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

Erosion and Sediment Control Plan: A written description of the number, locations, sizes, and other pertinent information about best management practice methods designed to meet the requirements of this ordinance.

Extraterritorial Jurisdiction: The territorial authority of the City which extends to all unincorporated land located within two (2) miles of the corporate limits of the City as authorized by the North Dakota Century Code.

Flood Fringe: That portion of the flood plain outside of the floodway.

Floodplain: The areas adjoining a water course or water basin that have been or may be covered by a regional or base flood.

Floodplain Management: The regulation of the nature and location of construction on (or other occupancy of) lands subject to inundation by flood waters, so that foreseeable (probable) flooding damages will have an average annual risk smaller than some preselected amount. Floodplain management consists of technical and nontechnical studies, policies, management strategies, statutes and ordinances that collectively manage floodplains along rivers, streams, major drainageways, outfalls, or other conveyances. The federal government normally plays a major role in floodplain planning and management, whereas in urban stormwater management and design, local governments dominate the decision-making process.

Floodway: The channel of the water course, the bed of water basins, and those portions of the adjoining flood plains that are reasonably required to carry and discharge floodwater and provide water storage during a regional or base flood.

Hydric Soils: Soils that are saturated, flooded, or covered by water long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile.

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

Impervious Area: Impermeable surfaces, such as pavement or rooftops, which prevent the infiltration of water into the soil.

Land Development Activity: The construction or demolition of buildings, roads, parking lots, paved storage areas, and similar facilities.

Land Disturbing Activity: Any manmade change of the land surface including removing vegetative cover, excavating, filling and grading, but not including agricultural land uses such as planting, growing, cultivating and harvesting of crops; growing and tending of gardens; and harvesting trees.

Landowner: Any person holding title to or having an interest in land.

Land User: Any person operating, leasing, renting, or having made other arrangements with a landowner by which the landowner authorizes use of their land.

Local Detention: Detention provided to serve only the developing area in question and no areas outside of the development boundaries. This is also known as on-site detention.

Local Drainage System: The storm drainage system which transports the minor and major stormwater runoff to the major stormwater system serving only the property within the development boundaries. This is also known as the on-site drainage system.

Major Stormwater System: The portion of the total stormwater system that collects, stores, and conveys runoff that exceeds the capacity of the minor system. The major drainageways are readily recognizable natural or improved channels that conveys runoff that exceeds the capacity of the minor drainage system, including emergency overflow facilities. It transports the minor and

major stormwater runoff and serves more than the area within the development boundaries. The major system is usually less controlled than the minor system, and will function regardless of whether or not it has been deliberately designed and/or protected from encroachment, including when the minor system is blocked or otherwise inoperable. The major stormwater system is usually evaluated for the one hundred (100) year runoff event.

Management Practice: A practice or combination of practices to control erosion and water quality degradation.

Minor Stormwater System: The portion of the total drainage system that collects, stores and conveys frequently occurring runoff, and provides a relief from nuisance and inconvenience. This system has traditionally been carefully planned and constructed, and normally represents the major portion of the urban drainage infrastructure investment. The degree of inconvenience the public is willing to accept, balanced against the price it is willing to pay, typically establishes the drainage capacity or design recurrence frequency of a minor system. Minor systems include roof gutters and on-site drainage swales, curbed or side swaled streets, stormwater inlets, underground storm sewers, open channels and street culverts. Generally, the minor stormwater system is designed to accommodate the minor (or ordinary) storm recurring at regular intervals, generally from two (2) to ten (10) years.

Multiple-Purpose Facility: An urban stormwater facility that fulfills multiple functions, such as enhancement of runoff quality, erosion control, wildlife habitat, or public recreation, in addition to its primary purpose of conveying or controlling runoff.

National Pollution Discharge Elimination System (NPDES) Permit: Any permit or requirement enforced by the North Dakota State Department of Health pursuant to the Clean Water Act as amended for the purposes of regulating stormwater discharge.

On-Site Detention: Detention provided to serve only the developing area in question and no areas outside of the development boundaries. This is also referred to as local detention.

Outfall Facility: Any channel, storm sewer, or other conveyance receiving water into which a storm drain or storm drainage system discharges.

Outlet: Any outlet including storm sewers and combined sewer overflows, into a watercourse, pond, ditch, lake or other body of surface or groundwater.

Owner or Occupant: Any person owning or using a lot, parcel of land, or premises connected to and discharging stormwater into the stormwater system of

the City, and who pays for and is legally responsible for the payment of stormwater rates or charges made against the lot, parcel of land, building or premises, if connected to the stormwater system or who would pay or be legally responsible for such payment.

Permanent Development: Any buildings, structures, landscaping and related features constructed as part of a development project approved under a stormwater permit.

Permanent Facilities: Those features of a stormwater management plan which are part of any natural or constructed stormwater system that require periodic or minimal maintenance to retain their operational capabilities. This includes but is not limited to storm sewers, infiltration areas, detention areas, channels, streets, etc.

Permittee: Any person who applies for and receives a stormwater permit from the City.

Person: Any developer, individual, firm, corporation, partnership, franchise, association, owner, occupant of property, or agency - public or private.

Private Drainage Channel: A drainage channel on privately-owned land or easements which eventually discharges into a public drainage channel or public storm sewer.

Private Storm Sewer: A storm sewer on privately-owned land or easements which eventually discharges into a public drainage channel or public storm sewer.

Public Drainage Channel: A drainage channel located entirely within a naturally occurring or constructed watercourse.

Public Storm Sewer: A storm sewer located entirely within publicly owned land or easements.

Regional Detention: Detention facilities provided to serve an area outside the development of boundaries. A regional detention site generally receives runoff from multiple stormwater sources.

Regional Flood: A flood that is representative of large floods known to have occurred generally in the state and recently characteristic of what can be expected to occur on an average frequency in the magnitude of a one hundred (100) year recurrence interval. It is also referred to as the base flood.

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

Runoff: The rainfall, snowmelt, dewatering or irrigation water flowing over the ground surface and into open channels, underground storm sewers, and detention or retention ponds.

Sediment: Solid material or organic material that, in suspension, is being transported or has been moved by air, water, gravity, or ice, and deposited at another location.

Site: The entire area included in the legal description of the parcel or other land division on which the land development or land disturbing activity is proposed in the permit application.

Stabilize: To make the site steadfast or firm, minimizing soil movement by mulching and seeding, sodding, landscaping, concrete, gravel, or other measures.

State: The State of North Dakota.

Storm Sewer: A pipe or conduit for carrying storm waters, surface runoff, street and wash waters, and drainage, excluding sewage and industrial wastes.

Stormwater Detention: Temporary storage of stormwater runoff in ponds, parking lots, depressed grassy areas, roof tops, buried underground tanks, etc., for future or controlled release. Used to delay and attenuate flow.

Stormwater Management: The planned set of public policies and activities undertaken to regulate runoff under various specified conditions within various portions of the drainage system. It may establish criteria for controlling peak flows or runoff volumes, for runoff detention and retention, or for pollution control, and may specify criteria for the relative elevations among various elements of the drainage system. Stormwater management is primarily concerned with limiting future flood damages and environmental impacts due to development, whereas flood control aims at reducing the extent of flooding that occurs under current conditions.

Stormwater Management Criteria: Specific guidance provided to the engineer/designer to carry out drainage and stormwater management policies. An example might be the specification of local design hydrology - the design storm.

Stormwater Management System: Physical facilities that collect, store, convey, and treat stormwater runoff in urban areas. These facilities normally

include detention and retention facilities, streets, storm sewers, inlets, open channels, and special structures, such as inlets, manholes, and energy dissipators.

Stormwater Retention: Storage designed to eliminate subsequent surface discharge. Wet ponds are the most common type of retention storage (though wet ponds may also be used for detention storage).

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.

Unpolluted Water: Any water of quality equal to or better than the effluent criteria in effect, or water that would not cause a violation of receiving water quality standards and would not benefit by discharge into a sanitary sewer and wastewater treatment facilities is considered unpolluted.

Urban Area: Land associated with, or part of, a defined city or town. This title of the Code of Ordinances applies to urban or urbanizing, rather than rural, areas.

User: Any person who discharges, causes or permits the discharge of stormwater into the City's stormwater management system.

User Fee: A fee levied on users of a stormwater management system for the user's proportionate share of the cost of operation and maintenance (including replacement) of such works.

Watershed Master Plan: The plan that an engineer/designer formulates to manage urban stormwater runoff for a particular project or drainage area. It typically addresses such subjects as characterization of the site development and grading plan; peak rates of runoff, flow duration, runoff volumes for various return frequencies; locations, criteria and sizes of detention or retention ponds and conveyances; runoff control features; land parcels, easement locations, opinions of probable costs, measures to enhance runoff quality, salient regulations, and how the plan addresses them, and consistency with secondary objectives such as public recreation, aesthetics, public safety, and groundwater recharge. It is usually submitted to regulatory officials for their review for adoption.

Wetlands: Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this definition, wetlands must have the following three attributes.

- a. A predominance of hydric soils;

- b. Are inundated or saturated by the surface or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and
- c. Under normal circumstances support the prevalence of such vegetation.

14.1-01-03. Scope. Every applicant for a building permit, subdivision approval, or a permit to allow land disturbing activities must submit a Stormwater Management Plan to the City Engineer. No building permit, subdivision approval, or permit to allow land disturbing activities shall be issued until approval of the Stormwater Management Plan or a waiver of the approval requirement has been obtained in strict conformance with the provisions of this title.

Exemptions to the requirements of this section include:

1. Any part of a subdivision if a plat of the subdivision has been approved by the Board of City Commissioners and recorded with the Register of Deeds on or before the effective date of this title. A stormwater permit for land disturbing activities on such properties may still be required, however, in accordance with this title;
2. Land disturbing activity involving the construction of a single-family or a two-family dwelling;
3. A parcel for which a building permit has been approved on or before the effective date of this title;
4. Installation of a fence, sign, telephone, and electric poles and other kinds of posts or poles; or
5. Emergency work to protect life, limb, or property.

The City Engineer may waive any requirement of this title upon making a finding that compliance with the requirement will involve an unnecessary hardship, and the waiver of such requirement will not adversely affect the standards and requirements put forth in Chapter 14.1-05. The City Engineer may require as a condition of the waiver, such dedication or construction, or agreement to dedicate or construct, as may be necessary to adequately meet the said standards and requirements. At the City Engineer's discretion, a waiver request may, or at the request of a City Commissioner a waiver request shall, be brought before the Board of City Commissioners for consideration and approval or denial.

CHAPTER 14.1-02

STORMWATER MANAGEMENT PLAN - APPLICATION

14.1-02-01 Application

14.1-02-02 Contents of Stormwater Management Plan

14.1-02-03 Fees

14.1-02-01. Application. A written application for Stormwater Management Plan approval, along with the proposed Stormwater Management Plan, shall be filed with the City Engineer. The application shall include a statement indicating the grounds upon which the approval is requested, that the proposed use is permitted in the underlying zoning district, and adequate evidence showing the proposed use will conform to the standards set forth in this title. Prior to applying for approval of a Stormwater Management Plan, it is recommended that the applicant have the Stormwater Management Plan reviewed by an affected public agencies.

Two sets of legible copies of the drawings and required information shall be submitted to the City Engineer and shall be accompanied by a receipt from the City to document the payment of all required fees for processing and approval as set forth in Section 14.1-02-03. Plans shall be prepared to a scale appropriate to the site of the project and suitable for the review to be performed.

14.1-02-02. Contents of Stormwater Management Plan. At a minimum, the Stormwater Management Plan shall contain the following information:

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

a. The name and address of the applicant, the section, township and range, and the north point, date and scale of drawing, and number of sheets;

b. The location of the tract by an insert map at a scale sufficient to clearly identify the location of the property and giving such information as the names and numbers of adjoining roads, railroads, utilities, subdivisions, towns, and districts or other defining landmarks;

c. Existing topography with a contour interval appropriate to the topography of the land, but in no case having a contour interval greater than two feet;

d. A watershed boundary map illustrating the project site location as a subwatershed within the watershed of the larger or major drainage basin;

e. A delineation of streams, rivers, public waters and the presence or absence of wetlands located on and immediately adjacent to the site, including depth of water, a general description of vegetative cover found within the site, a statement of general water quality, and any classification given to the water body by state or federal agencies;

f. Location and dimensions of existing stormwater drain systems and natural drainage patterns on and immediately adjacent to the site delineating in which direction and at what rate stormwater is conveyed from the site, identifying the receiving stream, river, public ditch, or wetland, and setting forth those areas of the unaltered site where stormwater collects or passes;

g. A description of the soils on the site, including a map indicating soil types of the areas to be disturbed, containing information on the suitability of the soils for the type of development proposed, potential for erosion, the type of stormwater management system proposed, and any remedial steps to be taken by the developer to render the soils suitable.

h. Current extent of vegetative cover and a clear delineation of any vegetation proposed for removal;

i. The current land use of the area in which the site is located;
and

j. The 100-year flood plains, flood fringes, and floodways.

2. Site Construction Plan. A Site Construction Plan shall be provided, including:

a. Locations and dimensions of all proposed land disturbing activities and any phasing or scheduling of those activities;

b. Approximate locations of all temporary soil or dirt stockpile areas;

c. Location and description of all construction site erosion control measures necessary to meet the requirements of this ordinance;

d. A schedule of anticipated starting and completion dates for each land disturbing activity, including the installation of construction site erosion control measures needed to meet the requirements of this ordinance; and

e. Provisions for maintaining the construction site erosion control measures prior to, during, and after construction.

3. Plans of Final Site Conditions. A Plan of Final Site Conditions on the same scale as the existing site map showing the proposed site changes shall be provided, including:

a. The proposed final grading plan shown at contours at the same interval as provided above or as required to clearly indicate the relationship of the proposed changes to existing topography and remaining features;

b. A landscape plan, drawn to an appropriate scale, including dimensions and distances and the location, type, size and description of proposed landscape materials which will be added to the site as part of the development;

c. A drainage plan of the developed site delineating the direction and at what rate stormwater runoff will be conveyed from the site and setting forth the areas of the site where stormwater will be collected;

d. The proposed size, alignment, and intended use of any structures to be erected on the site;

e. A clear delineation and tabulation of all areas which shall be paved or surfaced, including a description of the surfacing material to used; and

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

4. Stormwater Management Plan Report. A written report discussing pre and post development hydrology and hydraulic analysis, erosion and sedimentation control during and after construction, protective measures for proposed and existing structures, and water quality concerns. The contents of the report shall be in accordance with the recommended format in the City's Stormwater Design Standards Manual (Manual).

14.1-02-03. Fees. All applications for Stormwater Management Plan approval shall be accompanied by a processing and approval fee established by the City Engineer. In the case of complex applications or regional stormwater facilities, a secondary fee schedule will be used as established by the City Engineer. All fees under this title shall be reviewed and approved by the Board of City Commissioners.

CHAPTER 14.1-03

STORMWATER MANAGEMENT PLAN - REVIEW

14.1-03-01 Process

14.1-03-02 Duration

14.1-03-03 Conditions

14.1-03-01. Process. Stormwater Management Plans meeting the requirements of Chapter 14.1-02 shall be submitted to the City Engineer for review and compliance with the standards of Chapter 14.1-04. The City Engineer shall approve, approve with conditions, or deny the Stormwater Management Plan. If a particular stormwater management plan involves a complex application or has the potential for significant controversy, the City Engineer or the applicant may bring the proposed stormwater management plan before the Board of City Commissioners for consideration and public comment.

14.1-03-02. Duration. Approval of any plan submitted under the provisions of this ordinance shall expire one year after the date of approval unless construction has commenced in accordance with the plan. However, if prior to the expiration of approval, the applicant makes a written request to the City Engineer for an extension of time to commence construction setting forth the reasons for the requested extension, the City Engineer may grant one extension of not greater than one single year. Receipt of any request for an extension shall be acknowledged by the City Engineer within fifteen (15) days. The City Engineer shall make a decision on the extension within thirty (30) days of receipt. Any plan may be revised in the same manner as originally approved. Any denied application may be resubmitted with additional information addressing the concerns contained within the denial. The resubmittal is subject to all applicable fees and shall be considered as a new application.

14.1-03-03. Conditions. A Stormwater Management Plan may be approved subject to compliance with conditions reasonable and necessary to insure that the requirements contained in this ordinance are met. Such conditions may, among other matters, limit the size, kind or character of the proposed development, require the construction of structures, drainage facilities, storage basins and other facilities, require replacement of vegetation, establish required monitoring procedures, stage the work over

time, require alteration of the site design to insure buffering, require the acquisition of certain lands or easements, and require the conveyance to the City of Bismarck or other public entity of certain lands or interests therein. The City Engineer may specify special requirements for specific watersheds within the City and its extraterritorial jurisdiction. The nature of these requirements will be subject to the unique environmental and natural resource environment of each subwatershed. Approval of a plan shall bind the applicant to perform all of the conditions and requirements of the plan prior to any land disturbing activities.

CHAPTER 14.1-04

STORMWATER MANAGEMENT PLAN - APPROVAL STANDARDS

- 14.1-04-01 General
- 14.1-04-02 Stormwater Design Standards Manual
- 14.1-04-03 Models/Methodologies/Computations
- 14.1-04-04 Construction Plans and Specifications
- 14.1-04-05 Construction Activities
- 14.1-04-06 Stormwater Management Criteria for Permanent Facilities
- 14.1-04-07 Operation, Maintenance and Inspections
- 14.1-04-08 Easements and Bonds
- 14.1-04-09 Management of Site Vegetation
- 14.1-04-10 Plan Applicability

14.1-04-01. General. This section describes approval standards against which proposed Stormwater Management Plans will be measured. A Stormwater Management Plan which fails to meet the standards contained in this section shall not be approved by the City Engineer or the Board of City Commissioners. Other standards, such as state and federal standards, shall also apply. If two standards of different agencies conflict, the more restrictive standards shall apply.

It shall be the responsibility of the applicant to obtain any required permits from other governmental agencies having jurisdiction over the work to be performed. Typically, such agencies would include the Burleigh County Water Resource District, the Burleigh County Engineer's Office, the State Water Commission and State Engineer's

Office, the State Department of Transportation, the State Health Department, the State Historical Preservation Officer, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and possibly others.

In addition to this Stormwater Management Ordinance, the applicant is responsible for adhering to the requirements of other ordinances contained within the Code of Ordinances for the City of Bismarck, including:

1. Zoning ordinance regulations contained under Title 14 which are of special interest to new development projects.
2. Conformance with the requirements of the FP-Floodplain District, Title 14, Section 14-04-19.
3. Regulations governing the subdivision of land, Title 14, Chapter 14-09.

The following sections describe routine approval standards to be used in evaluating proposed Stormwater Management Plan.

14.1-04-02. Stormwater Design Standards Manual. The Stormwater Design Standards Manual (Manual), as adopted and amended by the City of Bismarck, contains the principal standards and design criteria for developing an effective and acceptable Stormwater Management Plan. The Manual contains an overview of the City's Stormwater Management Policy and design objectives as well as a detailed discussion of the contents of Stormwater Management Plans submitted to the City Engineer for approval. The Manual contains detailed criteria for hydrologic evaluations, the design of stormwater management system facility components, water quality protection standards, instructions for the development of an erosion and sedimentation control plan, and requirements for easements and right-of-way. The Manual also contains a discussion of operation and maintenance requirements, standard forms to be used, and standard construction details adopted by the City.

14.1-04-03. Models/Methodologies/Computations. Hydrologic models and design methodologies used to determine runoff conditions and to analyze stormwater management structures and facilities shall be approved in advance by the City Engineer. All Stormwater Management Plans, drawings, specifications, and computations for stormwater management facilities submitted for review shall contain a validated seal and be signed by a Professional Engineer registered in the State of North Dakota. This requirement will be met as part of the properly completed Stormwater Management Plan Report, as described in the Stormwater Design Standards Manual.

14.1-04-04. Construction Plans and Specifications. The construction plans and specifications prepared for the construction of the stormwater management facilities must:

1. Be consistent with the Stormwater Management Plan approved by the City Engineer.
2. Be in conformance with the requirements of the City of Bismarck Municipal Specifications and any other necessary permits issued by other governmental agencies.
3. Be sealed and signed by a Professional Engineer registered in the State of North Dakota.
4. Be submitted to the City Engineer for approval.
5. No construction may commence until approval of the construction plans and specifications has been received.

The set of construction plans, in a format acceptable to the City Engineer, shall contain a drawing or drawings delineating the erosion and sedimentation management plan, including details of silt fences, storm drain inlet protection, and other construction erosion control facilities. The construction specifications shall contain technical specifications describing erosion, sedimentation, and water control requirements during and after construction operations.

14.1-04-05. Construction Activities. Construction operations must at a minimum comply with the following requirements;

1. Site Dewatering. Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, upflow chambers, hydro-cyclones, soil concentrators or other appropriate controls as deemed necessary. Water may not be discharged in a manner that causes erosion, sedimentation, or flooding on the site; the receiving channels; or any wetland.
2. Waste and Material Disposal. All waste and unused building materials (including garbage, debris, cleaning wastes, wastewater, toxic materials, or hazardous materials) shall be properly disposed of off-site and not allowed to be carried by runoff into a receiving channel, storm sewer system, or wetland.
3. Tracking Management. Each site shall have roads, access drives and parking areas of sufficient width, length and surfacing to prevent sediment from being tracked onto public or private roadways. Any material reaching or placed on a public or private road shall be removed (not by flushing) before the end of each work day.
4. Water Quality Protection. The construction contractor shall be required to control oil and fuel spills, and the discharge of any chemicals to

prevent such spills or discharges from entering any water course, sump, sewer system, water body, or wetland.

5. Site Erosion and Sedimentation Control. Construction operations must include erosion and sedimentation control measures meeting accepted design criteria, standards and specifications contained in the Stormwater Design Standards Manual.

14.1-04-06 Stormwater Management Criteria for Permanent Facilities. Stormwater control facilities included as part of the final design for a permanent development shall be addressed in the Stormwater Management Plan and shall meet the following criteria:

1. Pre-versus Post Hydrological Response of Site. An applicant shall install or construct, on or for the proposed land disturbing or development activity, all stormwater management facilities necessary to manage increased runoff so that the two (2) year, ten (10) year and one hundred (100) year storm peak discharge rates existing before the proposed development shall not be increased and accelerated channel erosion will not occur as a result of the proposed land disturbing or development activity. In lieu of the installation or construction of stormwater management facilities, an applicant may make an in-kind or monetary contribution for the development and maintenance of regional stormwater management facilities designed to serve multiple land disturbing and development activities undertaken by one or more persons, including the applicant. The City Engineer shall establish this fee based upon an approved master plan and an analysis of drainage and flood protection benefits provided to property directly impacted by the regional stormwater management facilities.

2. Natural Features of the Site. The applicant shall give consideration to reducing the need for stormwater management facilities by incorporating the use of natural topography and land cover such as wetlands, ponds, natural swales and depressions as they exist before development to the degree that they can accommodate the additional flow of water without compromising the integrity or quality of these natural features.

3. Stormwater Management Strategies. The following stormwater management practices shall be investigated in developing a Stormwater Management Plan:

a. Natural infiltration of precipitation and runoff on-site, if suitable soil and geological conditions are available. The purpose of this strategy is to encourage the development of a Stormwater Management Plan that encourages natural infiltration. This includes providing as much natural or vegetated area on the site as possible, minimizing impervious

surfaces, and directing runoff to vegetated areas rather than to adjoining streets, storm sewers and ditches.

b. The flow attenuation by use of open vegetated swales and natural depressions.

c. Stormwater detention facilities.

d. Stormwater retention facilities (on a case by case basis).

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

4. Adequacy of Outlets. The adequacy of any outlet used as a discharge point for proposed stormwater management facilities must be assessed and documented to the satisfaction of the City Engineer. The hydraulic capacities of downstream natural channels, reaches, storm sewer systems, or streets shall be sufficient to receive post-development runoff discharges and volumes without causing increased property damages or any increase in the established base floodplain elevation. If a floodplain or floodway has not been established by the Federal Emergency Management Agency, then the applicant shall provide a documented analysis and estimate of the base flood elevation as certified by a Professional Engineer registered in the State of North Dakota. In addition, projected velocities in downstream natural or manmade channels shall not exceed that which is reasonably anticipated to cause erosion unless protective measures acceptable to the City Engineer are approved and installed as part of the Stormwater Management Plan. The assessment of outlet adequacy shall be included in the Stormwater Management Plan and shall be certified by a Professional Engineer registered in the State of North Dakota.

5. Stormwater Detention/Retention Facilities. Stormwater detention or retention facilities proposed to be constructed in the Stormwater Management Plan shall be designed according to the most current technology as reflected in the Stormwater Design Standards Manual.

14.1-04-07. Operation, Maintenance and Inspection. All stormwater management facilities shall be designed to minimize the need for maintenance, to provide access for maintenance purposes, and to be structurally sound. All stormwater management facilities shall have a plan of operation and maintenance that assures continued effective removal of pollutants carried in stormwater runoff. The City Engineer may inspect all stormwater management facilities at any time. Inspection records will be kept on file at the City Engineering Department. It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the stormwater management facilities for inspection and

maintenance purposes. The City Engineer shall retain enforcement powers for assuring adequate operation and maintenance activities through permit conditions and penalties for noncompliance orders.

14.1-04-08. Easements and Bonds. Easements or bonds may be required as conditions to the issuance of a permit.

14.1-04-09. Management of Site Vegetation. The applicant shall provide for the installation and maintenance of vegetation on development property in accordance with the following criteria:

1. Use of Impervious Surfaces. No person shall apply fertilizer to or deposit grass clippings, leaves, or other vegetative materials on impervious surfaces, or within stormwater drainage systems with impervious liners or conduits.

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

3. Use of Pervious Surfaces. No person shall deposit grass clippings, leaves, or other vegetative materials, with the exception of normal mowing or weed control, within natural or manmade drainageways, wetlands, or within wetland buffer areas.

14.1-04-10. Plan Applicability. A plan issued under this title runs with the land and is a condition of plat approval. Any owner or subsequent owner of any parcel within the plat must comply with the plan or any approval, revision or modification of the plan.

CHAPTER 14.1-05

STORMWATER MANAGEMENT PERMITS

14.1-05-01 Stormwater Management

14.1-05-02 Stormwater Management Permits

14.1-05-03 Final Stormwater Management Plan

14.1-05-01. Stormwater Management. It is unlawful to initiate land development, land disturbing, or other activities which result in an increase in stormwater quantities, degradation of stormwater quality, or restriction of flow in any storm sewer system, open ditch or natural channel, stormwater easement, water body, or wetland outlet within the jurisdiction of the City, without having first complied with the terms of this title.

14.1-05-02. Stormwater Management Permits.

1. Mandatory Permits. Any person proposing a development or project which involves land development, land disturbing, or other activities as defined in this title, shall obtain a stormwater management permit before initiating those activities.

2. Permit Application. All persons subject to meeting the requirements for a mandatory stormwater permit shall complete and file with the City Engineer an application in the form prescribed by the City Engineering Department and accompanied by a fee established by the City Engineer and adopted by the Board of City Commissioners. The permit application shall be accompanied by a Stormwater Management Plan as prescribed under Chapter 14.1-02 of this title. The City Engineer will evaluate the data furnished as part of the Stormwater Management Plan and may require additional information. After evaluation and acceptance of the Stormwater Management Plan, the City Engineer may issue a stormwater management permit subject to any terms and conditions deemed necessary.

3. Permit Conditions. Stormwater management permits are issued subject to all provisions of this title and all other applicable regulations, user charges and fees established by the City. Permits may contain any of the following conditions:

a. The user fee for a stormwater outlet utilizing a regional stormwater management facility;

b. Limits on the maximum rate of stormwater discharge;

c. Limits on water quality degradation of stormwater discharge;

d. Requirements for the installation, operation and maintenance of stormwater detention/retention facilities.

e. Compliance schedule;

f. Requirements for notification to and acceptance by the City Engineer of any land disturbing activities which have the potential for increasing the rate of stormwater discharge resulting in degradation of stormwater quality; and

g. Other conditions as deemed appropriate by the City Engineer to insure compliance with this title.

4. Permit Duration. Permits must be issued for a time period specified by the City Engineer. The applicant shall apply for permit renewal a minimum of ninety (90) days prior to the expiration of the applicant's existing permit. The terms and conditions of a permit are subject to modification by the City Engineer during the term of the permit as set forth in paragraph five (5).

5. Permit Modification. Permits may be modified by the City Engineer for just cause upon 30 days' notice. Just cause shall include but not be limited to:

- a. Promulgation of a new applicable nationwide permit standard;
- b. Changes in the requirements of this ordinance;
- c. Changes in the process used by the permittee or changes in discharge rate, volume, or character; and
- d. Changes in the design or capability of receiving stormwater facilities.

The applicant must be informed of any proposed changes in the permit at least thirty (30) days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

6. Permit Amendments. Stormwater permits may be amended only by a written request submitted by the Permittee to the City Engineer. This request shall contain the reason for the change and documentation related to any additional impacts which may result from amendment approval. Amendment requests submitted prior to issuance of a stormwater permit shall be considered part of the original submittal. Amendment requests filed after permit approval shall be considered and reviewed under the same procedures and guidelines as used for the stormwater permit applications under this title.

7. Permit Transfer. A permit runs with the property it covers and is transferable to new owners in its entirety or by parcel, with each parcel being subject to the permit and any conditions which apply to that parcel.

8. Monitoring Facilities. The City Engineer may require the applicant to provide and operate at the applicant's expense a monitoring facility to allow inspection, sampling, and flow measurements of each stormwater facility component. Where at all possible, the monitoring facility shall be located on the property of the applicant as opposed to on public rights-of-way. Ample room

must be allowed for accurate flow measuring and sampling and the facility shall be kept in a safe and proper operating condition.

9. Inspection. The City Engineer may inspect the stormwater management facilities of any permittee to determine compliance with the requirements of this title. A permittee shall allow the City Engineer to enter upon the premises at all reasonable hours for the purposes of inspection, sampling or record examination. The City Engineer shall be allowed to set up equipment on the permittee's premises as required for the purpose of collecting samples and flow recording.

14.1-05-03. Final Stormwater Management Plan. Upon completion of all required construction activities, the permit applicant shall submit to the City Engineer the final Stormwater Management Plan to document any change to the original Stormwater Management concept. The final Stormwater Management Plan shall contain Record Drawings showing the final configuration for all improvements as constructed. The final Stormwater Management Plan and Record Drawings shall be certified by a Professional Engineer registered in the State of North Dakota.

CHAPTER 14.1-06

ENFORCEMENT

- 14.1-06-01 Emergency Suspension of Permits
- 14.1-06-02 Revocation of a Permit
- 14.1-06-03 Notification
- 14.1-06-04 Hearing
- 14.1-06-05 Legal Action

14.1-06-01. Emergency Suspension of Permits. The City Engineer may for cause order the suspension of the stormwater management permit of a person or parcel owner when it appears to the City Engineer that an actual or threatened discharge presents or may present an imminent or substantial danger to the health or welfare of persons downstream, substantial danger to the environment, or a violation of any permit conditions imposed by this title. If any person is notified of the suspension of a stormwater management permit and/or a person fails to comply voluntarily with the suspension order, the City Engineer shall commence whatever steps are necessary to obtain compliance, including judicial proceedings. The City Engineer may reinstate the stormwater management permit upon proof of compliance with all permit conditions.

Whenever the City Engineer orders the suspension of a stormwater management permit pursuant to the emergency provisions of this section, the City Engineer shall serve notice on the permittee personally, by registered or certified mail. The permittee has the right to an informal hearing before the City Engineer upon request made in writing and filed with the City Engineer. The informal hearing must be held within five (5) days of the request. Following the hearing, the City Engineer may affirm, modify or rescind the order.

Any applicant dissatisfied with an order the City Engineer issued pursuant to this section may request a hearing before the Board of City Commissioners by filing a written request for a hearing with the City Engineer, within fifteen (15) days of receipt of the order, who shall inform City Administration. The hearing must be held within thirty (30) days of receipt of the request, or as subject to the current meeting schedule, whereupon the Board of City Commissioners may affirm, modify or rescind the order. A request for a hearing filed pursuant to this section does not stay the order while the hearing is pending.

14.1-06-02. Revocation of a Permit. A stormwater management permit may be revoked following notice and an opportunity for a hearing in accordance with Sections 14.1-06-03 and 14.1-06-04. The Board of City Commissioners may revoke a stormwater management permit for cause, including but not limited to:

- a. Violation of any terms or conditions of the stormwater management permit;
- b. False statements on any required reports;
- c. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; or
- d. Any other violation of this title or related ordinance.

The Board of City Commissioners may suspend a stormwater management permit and order a temporary work stoppage to bring a project into compliance. Notice of such an order shall be given and a hearing provided in accordance with Sections 14.1-06-03 and 14.1-06-04.

14.1-06-03. Notification. Whenever the City Engineer finds that any person has violated or is violating this title, stormwater discharge permit and/or its conditions, or any prohibition, limitation or requirement contained herein, the City Engineer shall serve upon such person a written notice stating the nature of the violation. Within thirty (30) days of the date of the notice, unless a shorter time frame is set by the City Engineer due to the nature of the violation, a plan for the satisfactory correction thereof must be submitted to the City Engineer.

14.1-06-04. Hearing. If the violation is not corrected by timely compliance, the City Engineer may order any permittee who causes or allows a violation to a stormwater permit to show cause before the Board of City Commissioners why the order of the City Engineer should not be upheld. A notice of hearing must be served on the permittee specifying the time and place of a hearing to be held by the Board regarding the order of the City Engineer, and directing the permittee to show cause before the Board why the order of the City Engineer should not be upheld. The notice must be served personally or by registered or certified mail at least ten (10) days before the hearing. The evidence submitted at the hearing shall be considered by the Board which shall then either uphold, modify or rescind the order of the City Engineer. An appeal of the Board's decision may be taken according to law.

14.1-06-05. Legal Action. The discharge of deposited or eroded materials onto public rights-of-way or public storm sewer systems within the City of Bismarck shall be considered an offense and may result in an order to remove such materials. Removal of such materials shall be at the owners expense based on the properties from which they originated. The owner shall have three (3) days after receiving the notice to remove these materials. If such materials are not removed they may be removed under the City Engineer's direction and any associated costs shall be the responsibility of the owner.

If any person commences any land disturbing activities which result in increased stormwater quantity or stormwater quality degradation into the City stormwater management system contrary to the provisions of this title, federal or state requirements or any order of the City, the City Attorney may, following the authorization of such action by the Board of City Commissioners, commence action for appropriate legal and/or equitable relief.

CHAPTER 14.1-07

PENALTIES

- 14.1-07-01 Penalty
- 14.1-07-02 Cost of Damage
- 14.1-07-03 City Attorney's Fees and Costs
- 14.1-07-04 Falsifying Information

14.1-07-01. Penalty. Any person who is found to have violated an order of the Board of City Commissioners made in accordance with this title, or who has failed to comply with any provision of this title and the orders, rules, regulations and permits issued hereunder, is guilty of an offense. Each day on which a violation shall occur or continue shall be deemed a separate and distinct offense.

14.1-07-02. Costs of Damage. Any person violating any of the provisions of this title or who initiates an activity which causes a deposit, obstruction, or damage or other impairment to the City's stormwater management system is liable to the City for any expense, loss, or damage caused by the violation or the discharge. The City may bill the person violating this title the costs for any cleaning, repair or replacement work caused by the violation of stormwater discharge.

14.1-07-03. City Attorney's Fees and Costs. In addition to the civil penalties provided herein, the City may recover reasonable attorney's fees, court costs, court reporter's fees, and other expenses of litigation by appropriate action against the person found to have violated this title or the orders, rules, regulations and permits issued hereunder.

14.1-07-04. Falsifying Information. Any person who knowingly makes any false statements, representations, or certification in any applicable record, report, plan, or other document filed or required to be maintained pursuant to this title, or stormwater management permit, or who knowingly falsifies, tampers with, or knowingly renders inaccurate any monitoring devices or method required under this chapter, shall be guilty of an offense.

Section 2. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. Effective Date. This ordinance shall take effect on January 1, 1998.

First reading: January 14, 1997

Second reading as amended: February 25, 1997

Final passage and adoption as amended: February 25, 1997

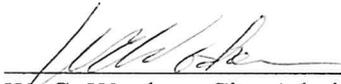
Publication dates: February 11 and 18, 1997

STATE OF NORTH DAKOTA)
)
COUNTY OF BURLEIGH)

I, W. C. Wocken, do hereby certify that I am the duly appointed, qualified City Administrator of the City of Bismarck, North Dakota and that the foregoing is a full, true and correct copy of an ordinance adopted by the Board of City Commissioners at its regular meeting of February 25, 1997.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the City of Bismarck, North Dakota, this 26th day of February, 1997.

(SEAL)



W. C. Wocken, City Administrator