



City of Grand Island

Tuesday, June 27, 2017

Council Session

Item F-3

#9636 - Consideration of Adopting Updates to Chapter 40 of the Grand Island City Code Related to Storm Water Regulations

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Jeremy Rogers, Storm Water Program Manager

Meeting: June 27, 2017

Subject: Consideration of Adopting Updates to Chapter 40 of the Grand Island City Code Related to Storm Water Regulations

Presenter(s): John Collins PE, Public Works Director

Background

On December 15, 2009, via Ordinance No. 9246, Grand Island City Council adopted Chapter 40 to Grand Island City Code. Such ordinance addressed Illicit Discharge and Storm Water Management practices.

An illicit discharge ordinance is a requirement of the National Pollutant Discharge Elimination System (NPDES) permit for small Municipal Separate Storm Sewer Systems (SMS4). The ordinance empowers the City to track, identify, and eliminate illicit discharges to the storm drainage system.

Discussion

The City of Grand Island is obligated to conform to the Environmental Protection Agency (EPA) post construction requirements. In order for the City to meet this responsibility updates are necessary to Chapter 40, which will address the following.

- Designate individuals to enforce such ordinance
- Geothermal Water Source Heat Pump Systems
- Post Construction Storm Water Management
- Land Redevelopment Activities
- Storm Water Treatment Facilities
- Permitted vs. Prohibited Discharges
- Site plan review
- Inspection and Maintenance of Best Management Practices / Storm Water Treatment Facilities

For reference a marked copy of Chapter 40 is attached to note updates being made to this section of City Code.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve the adoption of updates to Chapter 40 of the Grand Island City Code related to Storm Water Regulations.

Sample Motion

Move to approve the ordinance.

ORDINANCE NO. 9XXX

CHAPTER 40

STORM WATER MANAGEMENT

§40-1. Purpose/Intent

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Grand Island, Nebraska through the regulation of stormwater and non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. In addition, the purpose is to control land disturbances, or to reduce or eliminate soil erosion and sedimentation within the City of Grand Island, NE. This ordinance 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. The objectives of this ordinance are:

- (1) To regulate the contribution of pollutants to the municipal separate storm sewer system by discharges by any person.
- (2) To prohibit illicit connections and discharges to the municipal separate storm sewer system.
- (3) To prevent non-storm water discharges generated as a result of spills, inappropriate dumping, or disposal to the City of Grand Island separate storm drainage system.
- (4) To reduce pollutants in stormwater discharges from construction activity by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land.
- (5) To require the construction of locally-approved, permanent stormwater runoff controls to protect water quality and maintain non-erosive hydrologic conditions downstream of construction activity and development.
- (6) To require responsibility for and long-term maintenance of structural stormwater control facilities and nonstructural stormwater management.
- (7) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.
- (8) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by geothermal water source heating and cooling system discharges by any user.
- (9) To limit the connection and discharges of spent groundwater from geothermal heat pump systems to the MS4

§40-2. Definitions

For the purposes of this ordinance, the following shall mean:

Authorized Enforcement Agency: The City of Grand Island, its employees, or third parties designated by the Public Works Director which enforce this ordinance.

Best Management Practices(BMPs): Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or storm water conveyance systems. Best Management Practices also include treatment practices, operating procedures, and practices to control site runoff, spillage, leaks, sludge disposal, water disposal, or drainage from raw materials storage.

Clean Water Act: The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Common Plan of Development or Sale: A contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan which may include, but is not limited to, an announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot.

Construction Activity: Activities subject to National Pollutant Discharge Elimination System Construction Permits. Such activities include, but are not limited to, clearing, grubbing, grading, excavating, demolition and other land disturbing actions.

Construction Site: Any location where construction activity occurs.

Contractor: Any person performing or managing construction work at a construction site, including, but not limited to, any construction manager, general contractor or subcontractor, and any person engaged in any one or more of the following: earthwork, pipework, paving, building, plumbing, mechanical, electrical, landscaping or material supply.

Clearing: Any activity that removes the vegetative surface cover.

Director: The City Engineer or the Public Works Director

Disturbed Area: Area of the land's surface disturbed by any work or activity upon the property by means including but not limited to grading, excavating, stockpiling soil, fill, or other materials, clearing, vegetation removal, removal or deposit of any rock, soil, or other materials, or other activities which expose soil. Disturbed area does not include the tillage of land that is zoned for agricultural use.

Drainage Plan: A schematic of the proposed area and how it connects to city's storm sewer system. Include proposed location, grade, direction of flow, elevations, drainage structures and drainage areas.

Earthwork: The disturbance of soil on a site associated with construction activities.

Erosion: The detachment and movement of soil or rock fragments by water, wind, ice or gravity.

Erosion Control: Measures that prevent soil erosion to the maximum extent practicable.

Erosion and Sediment Control Plan: A plan that indicates the specific measures and sequencing to be used for controlling sediment and erosion on a development site during construction activity according to locally approved standards, specification, and guidance.

Final Stabilization: When all soil disturbing activities at the site have been completed, and vegetative cover has been established with a uniform density of at least 70 percent of predisturbance levels, or equivalent permanent, physical erosion reduction methods have been employed. For purposes of this Ordinance, establishment of a vegetative cover capable of providing erosion control equivalent to pre-existing conditions at the site is considered final stabilization.

Financial Security: A surety bond, performance bond, maintenance bond, irrevocable letter of credit, or similar guarantees provided to the City of Grand Island to assure that a construction Stormwater Pollution Prevention Plan is carried out in compliance with requirements of this Ordinance.

Geothermal Water Source Heat Pump System – A geothermal system uses the Earth’s thermal properties in conjunction with electricity to provide greater efficiency in the heating and cooling of buildings.

Geothermal System (Closed Loop) – A mechanism for heat exchange, which consists of the following basic elements: Underground loops of piping; heat transfer fluid; a heat pump; an air distribution system. An opening is made in the Earth. A series of pipes are installed into the opening and connected to a heat exchange system in the building. The pipes form a “closed loop” and are filled with a heat transfer fluid. The fluid is circulated through the piping from the opening into the heat exchanger and back. The system functions in the same manner as the open loop system except there is no pumping of well or surface water.

Geothermal System (Open Loop) – Water is pumped from a well or surface water into a heat exchanger located in a surface building. The water drawn from the Earth is then pumped back into the aquifer through a different well or in some cases the same well, otherwise known as re-injection. Alternatively, the ground water could be discharged the Earth’s surface or a surface water body, also known as pump & dump. In the heating mode, cooler water is returned to the Earth’s surface or surface water body, while in the cooling mode warmer water is returned to the Earth’s surface or surface water body.

Hazardous Materials: Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illicit Discharge: Any unauthorized direct or indirect non-storm water discharge to the storm drainage system.

Illicit Connections:

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

- (d) An Illicit Connection does not include connections that are allowed under section 40-8 of this code.

Industrial Activity: Activities subject to National Pollutant Discharge Elimination System Industrial Permits.

Low Impact Development (LID): means de-centralized management of precipitation that would otherwise be stormwater runoff, utilizing design techniques that infiltrate, filter, store, evaporate, or temporarily detain stormwater.

Municipal Separate Storm Sewer System (MS4): Publicly-owned facilities by which stormwater is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage ditches/channels, reservoirs, and other drainage structures.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit: Means a permit issued by Environmental Protection Agency (or by the State of Nebraska under authority delegated to it) 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.

NDEQ: Nebraska Department of Environmental Quality.

N.O.I (Notice of Intent): is a formal announcement of intent to disturb the earth surface and is used to request a City, State, or Federal permit to discharge stormwater for a variety of activities primarily for construction and development.

N.O.T. (Notice of Termination): is a formal announcement that all construction and ground disturbance activities are no longer authorized to discharge stormwater associated with any City, State, or Federal permitted activity under the NPDES program.

Outfall: The point of discharge to any watercourse from a public or private stormwater drainage system.

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

Operator: The individual who has day-to-day supervision and control of activities occurring at the construction site. This can be the owner, the developer, the general contractor or the agent of one of these parties. It is anticipated that at different phases of a construction project, different types of parties will satisfy the definition of 'operator' and the pertinent portions of any applicable permit authorization from the State of Nebraska will be transferred as the roles change.

Owner: The person who owns a facility, development, part of a facility, or land.

Permittee: The applicant in whose name a valid permit is issued.

Person: Any individual, association, organization, partnership, firm, corporation or other entity recognized by law.

Phasing: Clearing a parcel of land in distinct phases, with the stabilization of each phase before the clearing of the next.

Pollutant: Anything which causes or contributes to pollution. Pollutants include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes; yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Post-Construction: The general time period referenced in perpetuity from the approval for final acceptance of the construction phase of any construction activity.

Post-Construction Stormwater Management: The management of stormwater for a period of time in perpetuity from approval for final acceptance of the construction phase of any construction activity. The management of stormwater includes the use of STFs that meet minimum site performance standards in accordance with a community's MS4 permit. STFs are intended to provide stormwater treatment during this time period and are considered functional after vegetation has been established.

Post-Construction Stormwater Management Plan (PCSWMP): Documentation supporting analysis, design, maintenance and inspection of STFs installed on a site in order to meet minimum site performance standards in accordance with a community's MS4 permit.

Receiving Water: Is any water of the State of Nebraska, including any and all surface waters that are contained in or flow in or through the State of Nebraska. These include all watercourses, even if they are usually dry, irrigation ditches that receive municipal stormwater, and storm sewer systems owned by other entities.

Premises: Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Redevelopment: Any land-disturbing activity that results in the creation, addition or replacement of at least five thousand (5,000) square feet of impervious surface area on an already developed site. Redevelopment includes, but is not limited to the following activities that meet the minimum standards set forth in this definition:

- (1) The expansion of a building footprint;
- (2) Addition or replacement of a structure;
- (3) Replacement of impervious surface that that is not part of a routine maintenance activity;
- (4) Land disturbing activities related to structural or impervious surfaces.

Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety

Sediment: Soil (or mud) that has been disturbed or eroded and transported naturally by water, wind or gravity, or mechanically by any person.

Sediment control: Measures that prevent eroded sediment from leaving the site.

Site: The land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

Site plan: A plan or set of plans showing the details of any land disturbance activity of a site including but not limited to the construction of structures, open and enclosed drainage facilities, stormwater management facilities, parking lots, driveways, curbs, pavements, sidewalks, bike paths, recreational facilities, ground covers, plantings and landscaping.

Spill: A release of solid or liquid material, which may cause pollution of the Municipal Separate Storm Sewer System or waters of the State.

Stabilization: The use of practices that prevent exposed soil from eroding.

Storm Drainage System: Publicly-owned facilities by which stormwater is collected and/or conveyed, including, but not limited to; any roads with drainage systems; municipal streets; gutters; curbs; inlets; piped storm drains; pumping facilities; retention and detention basins; natural and human- made or altered drainage channels; reservoirs; and other drainage structures. The storm drainage system in Grand Island is a municipal separate storm sewer system as defined by applicable federal regulations.

Storm Water: Any water that occurs in surface flow, runoff, or drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater Pollution Prevention Plan: A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

Stormwater Treatment Facilities (STFs): Permanent best management practices put in place to provide control and treatment of stormwater runoff after construction activity for land development is complete. These facilities are physical in nature and sometimes referred to as “structural” BMPs and can include Low Impact Development Techniques.

Subdivision Development: Includes activities associated with the platting of any parcel of land into two or more lots and all construction activity taking place thereon.

Utility Agency/Contractor: Private utility companies, public utility departments, or other utility providers, contractors working for such private utility companies, or public entity utility departments, or other utility providers engaged in the construction or maintenance of utility lines and services, including water, sanitary sewer, storm sewer, electric, gas, telephone, television and communication services.

Wastewater: Means any water or other liquid, other than uncontaminated stormwater, discharged from any premises or facility. Wastewater includes sewage that is treated at the City’s Waste Water Treatment Plant.

Waters of the State: Any and all surface and subsurface waters that are contained in or flow in or through the State of Nebraska. The definition includes all watercourses, even if they are usually dry.

§40-3. Applicability

This ordinance shall apply to all water entering the storm drainage system generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

§40-4. Responsibility for Administration

The City of Grand Island shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the City of Grand Island may be delegated by the **Public Works Director** to persons or entities acting in the beneficial interest of, or in the employ of the City.

§40-5. Severability

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this ordinance.

§40-6. Ultimate Responsibility

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards. Compliance with this ordinance does not act as a waiver or defense to any person for contamination, pollution, or unauthorized discharge of pollutants. Ultimate responsibility for prohibited acts rests with persons who own or are in possession or control of premises from which the discharge of contaminants or pollutants emanates.

§40-7. Illicit Discharge

No person shall discharge or cause to be discharged into the municipal storm drainage system or watercourses any materials including, but not limited to, pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards. The commencement, conduct or continuance of any illicit discharge to the storm drainage system is prohibited except as allowed under section 40-8 of this code.

§40-8. Discharges to the Municipal Storm Sewer System MS4

1. Permitted Discharges

- (a) The following discharges are exempt from discharge prohibitions established by this ordinance: water line flushing or other potable water sources; landscape irrigation or lawn watering; diverted stream flows; rising ground water; ground water infiltration to storm drains; uncontaminated pumped ground water; foundation or footing drains (not including active groundwater dewatering systems); crawl space pumps; air conditioning condensation; springs; non-commercial washing of vehicles; natural riparian habitat or wet-land flows; swimming pools (if dechlorinated - typically less than one PPM chlorine); **firefighting** activities; and any other water source not containing Pollutants.
- (b) Discharges determined by the City to be necessary to protect public health and safety.
- (c) Dye testing if the City is notified in writing prior to the time of the test.
- (d) Any non-storm water discharge permitted under an National Pollutant Discharge Elimination system permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, 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 drainage system.

2. Prohibited Discharges

- (a) The following discharges are strictly prohibited from entering the City Storm Sewer Conveyance System established by this ordinance: wastewater from the washout of concrete, wastewater from the washout and cleanout of stucco, paint, form release oils, curing compounds, other construction materials, fuels, oils, other pollutants used in vehicle and equipment operation and maintenance, soaps, and solvents used in vehicle and equipment washing.
- (b) Any other discharge that is not permitted by this ordinance.

§40-9. Illicit Connection

The Construction, Use, Maintenance or continued existence of illicit connections to the storm drainage system are prohibited.

- (a) This prohibition expressly includes, without limitation, illicit connections made in the past regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (b) A person is considered to be in violation of this ordinance if the person connects a line conveying sewage or pollutants to the Municipal Separate Storm Sewer System or allows such a connection to continue.

§40-10. Suspension of Storm Drainage System Access

Suspension due to Illicit Discharges in Emergency Situations

The City of Grand Island may, without prior notice, suspend storm drainage system discharge access to a person when the City deems it necessary to prevent an actual or threatened discharge which presents or may present imminent and substantial danger to: the environment; to the health or welfare of persons or to the storm drainage system; or to waters of the United States of America. If the person fails to comply with a suspension order issued in an emergency, the City of Grand Island may take such steps as deemed necessary to prevent or minimize damage to persons, the storm drainage system, waters of the United States of America.

Suspension due to the Detection of Illicit Discharge

Any person discharging to the storm drainage system in violation of this ordinance may have their storm drainage system access terminated if such termination would abate or reduce an illicit discharge. The City will notify a person of the proposed termination of storm drainage system access by personal delivery or by United States Mail. The person may request a hearing before the City Director of Public Works by delivering such request in writing to the City Clerk. The person is not entitled to a stay of the termination pending any such hearing.

A person commits an offense if the person accesses or attempts to access the storm drainage system from premises terminated pursuant to this Section, without the prior approval of the City.

§40-11. Construction.

(A) GENERAL REQUIREMENTS FOR CONSTRUCTION ACTIVITIES.

- (1) Except for construction activity relating to the Building Phase of Development, the City of Grand Island shall require proof of coverage by a NDEQ general permit authorization for Storm Water Discharges from

Construction Sites before providing approval for construction activity and land developments requiring – including but not limited to: site plan applications, subdivision applications, building applications, and right-of-way applications from the City of Grand Island, unless exempt pursuant to Subsection (a) below. These provisions apply to all portions of any plan for land disturbing activity which would cause the disturbance of at least one acre of soil even though multiple, separate and distinct land development activities within the overall development may take place at different times on different schedules.

(a) The following activities are exempt from this Ordinance:

- (i) Any emergency activity that is necessary for the immediate protection of life, property, or natural resources; and
 - (ii) Construction activity that provides maintenance and repairs performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.
- (2) The city shall be invited to the pre-construction meeting to review the installation of all temporary erosion and sediment control BMPs included on the approved erosion and sediment control plan at least two (2) business days before any construction activities are scheduled to start.
 - (3) Solid waste, industrial waste, yard waste and any other pollutants or waste on any construction site shall be controlled through the use of BMPs. Waste or recycling containers shall be provided and maintained by the owner or contractor on construction sites where there is the potential for release of waste. Uncontained waste that may blow, wash or otherwise be released from the site is prohibited. Sanitary waste facilities shall be provided and maintained in a secured manner.
 - (4) Ready- mixed concrete, or any materials resulting from the cleaning of vehicles or equipment containing such materials or used in transporting or applying ready-mixed concrete, shall not be allowed to discharge from any construction site. Concrete wasted on site must be disposed in a manner consistent with locally approved standards and generally require establishment of a designated wash-out area.
 - (5) Cover or perimeter control shall be applied within **seven (7)** days to any soil stockpiles, which will remain undisturbed for longer than **14** calendar days.
 - (6) Disturbed soil shall be managed with BMPs that are adequately designed, installed, and maintained according to locally-approved technical standards, specifications and guidance for the duration of the construction activity to minimize erosion and contain sediment within the construction limits.
 - (7) Sediment tracked or discharged onto public right-of-way shall be removed immediately.
 - (8) Bulk storage structures for petroleum products and other chemicals shall have adequate protection to contain all spills and prevent any spilled material from entering the MS4 or waters of the State.
 - (9) Temporary BMPs shall be removed and disturbed areas shall be stabilized with permanent BMPs at the conclusion of construction activity.

(B) REQUIREMENTS FOR THE BUILDING PHASE OF DEVELOPMENT.

- (1) Any person who engages in construction activity is responsible for compliance with this Ordinance and all applicable terms and conditions of the approved construction activity and SWPPP as it relates to the building phase of development. The following information shall be included with the application for a building permit and be submitted to the Public Works Department:

- (2) Either the legal description and NPDES permit number for the Larger Common Plan of Development; OR
- (3) The location of the property where the building phase of development is to occur; AND
- (4) Contractor acknowledgement that the building phase of development for the property described on the application for a building permit will be conducted in conformance with Chapter 40 of the Municipal Code and the Construction Activity SWPPP.
- (5) Site plans shall be submitted to the Public Works Director for the purpose of review and approval prior to issuance of a building permit and the beginning of the construction phase of development. This is to ensure compliance with EPA directives and with section 40-12 of this ordinance as it pertains to the Post-Construction Management of Stormwater run-off.

(C) CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN.

- (1) A SWPPP shall be prepared and updated in accordance with locally-approved technical standards, specification, and guidance for construction activity within the City of Grand Island and shall include an erosion and sediment control plan for land disturbance.
- (2) The SWPPP shall include a description of all potential pollution sources, temporary and permanent BMPs that will be implemented at the site. BMPs used will be approved by the Public Works Director.
- (3) The erosion and sediment control plan shall be submitted to the Public Works Director for review with any application covered in 40-11 (a) (1) of this Ordinance.
- (4) Land disturbing activities may not proceed until approval of the erosion and sediment control plan is provided by the Public Works Director.
- (5) The owner or operator is required to have a copy of the SWPPP readily available or on site for review with content that reflects the current condition of the construction activity and all records that demonstrate compliance and are required by this Ordinance.
- (6) The SWPPP shall include a description of routine site inspections.
 - (a) The owner or their representative shall inspect all BMPs at intervals of no greater than 14 calendar days and within 24-hours after any precipitation event of at least one half inch.
 - (b) Inspections of BMPs shall be conducted by an individual knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any erosion and sediment control measures selected to control the quality of stormwater discharges from the construction activity.
 - (c) Inspection reports shall provide the name and qualification of the inspector, date of the evaluation, risks to stormwater quality identified, and all corrective actions necessary to prevent stormwater pollution.
 - (d) The owner or operator of a construction activity may be requested to submit copies of inspection reports for review on a periodic basis by the Public Works Director.
- (7) Based on inspections performed by the owner, operator, authorized City of Grand Island personnel, State or Federal regulators, modifications to the SWPPP will be necessary if at any time the specified BMPs do not meet the objectives of this Ordinance. In this case, the owner shall meet with an appointed official of the

City of Grand Island to determine the appropriate modifications. All required modifications shall be completed within seven (7) calendar days of receiving notice of inspection findings, and shall be recorded in the SWPPP.

- (8) The owner or operator of a construction site shall be responsible for amending the SWPPP whenever there is a significant change in design, construction, operation, or maintenance, which has a significant effect on the potential for discharge of pollutants to the MS4 or receiving waters, or if the SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with land disturbance.
- (9) Records of inspection are to be maintained with the SWPPP for the life of the project. Inspection records are to be available to City of Grand Island inspectors upon request. Delay in providing a copy of the SWPPP or any requested records shall constitute a violation of this Ordinance.

(D) REQUIREMENTS FOR UTILITY CONSTRUCTION.

- (1) Utility agencies or their representatives shall develop and implement BMPs to prevent the discharge of pollutants on any site of utility construction within the City of Grand Island. The City of Grand Island may require additional BMPs on utility construction activity. If the utility construction disturbs greater than one (1) acre, the utility agency must comply with the requirements of Section 40-11 (a) & (b) of this Ordinance.
- (2) Utility agencies or their representative shall implement BMPs to prevent the release of sediment from utility construction sites. Disturbed areas shall be minimized, disturbed soil shall be managed and construction site exits shall be managed to prevent sediment tracking. Sediment tracked onto public right-of-way shall be removed immediately.
- (3) Prior to entering a construction site or subdivision development, utility agencies or their representatives shall obtain and comply with any approved erosion and sediment control plans for the project. Any impact to construction and post-construction BMP's resulting from utility construction shall be evaluated prior to disturbance by the developer and utility company. Repairs to the disturbed BMPs must be completed within forty eight (48) hours, by individuals agreed upon during the design phase or at a preconstruction meeting.

§40-12. Post-Construction.

The purpose of this section is to provide requirements and criteria to prevent and manage stormwater pollution and to diminish adverse impacts to health, safety, property, and the general welfare of the citizens of the City of Grand Island through regulating stormwater runoff from areas of development and redevelopment to the maximum extent practicable as required by the Federal Clean Water Act, 33.U.S.C. § 1251 et seq. (as amended to date), the Nebraska Environmental Protection Act, Neb. Rev. Stat. § 81-1501 et seq. (as amended to date) and the rules and regulations promulgated under such Acts. This chapter will also promote the public welfare by guiding and regulating the design, construction, and maintenance of areas of development and redevelopment. Additional criteria can be found in the City of Grand Island Post-Construction Stormwater Guidance Manual.

(A) POST-CONSTRUCTION REQUIREMENT OF PERMANENT BMPs/STFs.

- (1) Land development that meets the requirements of Section 40-11 (a) (1) must address stormwater runoff quality through the use of permanent BMPs/STFs. Permanent BMPs/STFs shall be provided for in the drainage plan for any subdivision plat, annexation plat, development agreement, subdivision agreement or other local development plan.
- (2) Structural BMPs/STFs located on private property shall be owned and operated by the owner(s) of the property on which the BMP is located; unless the City of Grand Island agrees in writing that a person or entity other than the owner shall own or operate such BMP/STF. As a condition of

approval of the BMP/STFs, the owner shall also agree to maintain the BMP/STF in perpetuity to its design capacity unless or until the City of Grand Island shall relieve the property owner of that responsibility in writing. The obligation to maintain the BMP/STF shall be memorialized on the subdivision plat, annexation plat, development agreement, subdivision agreement or other form acceptable to the City of Grand Island and shall be recorded with the City of Grand Island Public Works Department.

- (3) The preferred Structural BMPs/STFs that are acceptable in the City of Grand Island and its 2 mile jurisdictional boundary without additional review by the Public Works Director are: Bioswales, Rain Gardens, Permeable Pavement, Green Roofs, Retention Ponds, and Detention Ponds (Provided the detention Ponds include treatment areas to improve water quality; i.e. a treatment forebay and filtration strip). If there are other stormwater treatment measures a developer would like to use, plans for those measures will need to be submitted to and approved in writing by the Director of Public Works, prior to construction and development.
- (4) A Post Construction Stormwater Management Plan (PCSWMP) shall be submitted to the planning department for transmittal to the Public Works Director on a form or format specified by the director, as part of any preliminary plat application required under Sec.33-7; if not already submitted as part of a preliminary plat process. For any significant redevelopment, a post-construction stormwater management plan shall be submitted along with the permit application for any activity requiring a building permit under Sec.33-6.
 - a. For all developments that have not had a preliminary plat approved prior to January 1, 2019, the post-construction stormwater management plan, at a minimum, shall include Low Impact Development (LID) STFs to provide for water quality control of the first one-half inch of runoff from the site. The director may also require this minimum control level for replats that significantly increase the amount of impervious area in a preliminarily platted subdivision, which was approved prior to July 1, 2018.
 - b. For all developments with plats preliminarily approved after July 1, 2018 and for significant redevelopment projects, the post-construction stormwater management plan, at a minimum shall include the STF or STFs selected, the STF design, schedules and procedures for inspection and maintenance of the STFs, and where it is reasonably practicable, include STFs for water quality control of the first one-half inch of runoff from the site. Provisions for STFs are set forth in the Grand Island Post-Construction Stormwater Management Guide. For significant redevelopment projects that involve replacement of building structures without significant disturbance of existing parking or other pervious areas, BMPs for water quality control of the first one-half inch of runoff from the site shall not be required. For significant redevelopment projects involving an outlot parcel that is part of a greater existing development, the calculation of the area requiring control of the first one-half inch of runoff shall be based only on the impervious area of the project site that is being added or disturbed within the out lot parcel.

(B) Exemptions from the Post-Construction Storm Water Management Plan

Systems designed to accommodate only one single family dwelling unit, duplex, triplex, or quadraplex, provided the single unit **is not** part of a larger common plan of development or sale, are exempt from the requirements in this Ordinance to submit a Post-Construction Storm Water Management Plan.

Additional policies and procedures for the development and implementation requirements for BMPs/STFs can be found in the City of Grand Island Post-Construction Stormwater Management Guide.

(C) COMPLETION OF PERMANENT BMPs/STFs.

Upon completion of a project, the City of Grand Island shall be provided a written certification stating that the completed project is in compliance with the approved Final Drainage Plan. All applicants are required to submit “as built” plans for any permanent BMPs once final construction is completed and must be signed by a professional engineer licensed in the State of Nebraska.

(D) ONGOING INSPECTION AND MAINTENANCE OF PERMANENT BMPs/STFs.

- (1) The owner of site must, unless an on-site stormwater management facility or practice is dedicated to and accepted by the City of Grand Island, execute an inspection and maintenance agreement, that shall be binding on all subsequent owners of the permanent BMPs/STFs.
- (2) Permanent BMPs/STFs included in a Drainage Plan which is subject to an inspection and maintenance agreement must undergo ongoing inspections to document maintenance and repair needs and to ensure compliance with the requirements of the agreement, the plan and this Ordinance.
 - a. All BMPs/STFs must be inspected by the owner, using an approved inspection form,(Appendix B of the Grand Island Post-Construction Guidance Manual), for maintenance and repair requirements at a minimum, once per quarter.
 - b. All BMPs/STFs shall be inspected, by a qualified employee of the City of Grand Island, twice per year to ensure owner compliance with the design of the BMP/STF and to ensure maintenance and repair actions are adequately monitored.
- (3) The maintenance agreement shall also provide that if, after notice by the City to correct a violation requiring maintenance work, satisfactory corrections are not made by the owner(s) or occupant within a reasonable period of time (30 days maximum), and the City may perform all necessary work to place the facility in proper working condition. The owner(s) or occupant of the facility shall be assessed the cost of the work and any lawful penalties.

§40-13. Technical Standards, Specifications, And Guidance.

All BMPs/STFs designed to meet the requirements of this Ordinance shall reference the appropriate technical standards, specifications and guidance as follows:

- (1) City of Grand Island Standards and Specifications for Construction.
- (2) Nebraska Department of Roads Drainage Design and Erosion Control Standards, Specifications and Guidance.
- (3) Any other alternative methodology approved by the City of Grand Island, which is demonstrated to be effective.

§40-14. Monitoring of Discharges

- (a) Applicability.

This section applies to all premises that have storm water discharges associated with industrial activity, including construction activity.

- (b) Access to premises.
- (1) The City of Grand Island's designees shall be permitted to enter and inspect premises and facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the City.
 - (2) The City's designees shall be given access to all parts of the premises for the purposes of: inspection; sampling; examination and copying of records that must be kept under the conditions of the National Pollutant Discharge Elimination System permit to discharge storm water; and the performance of any additional duties as defined by state and federal law.
 - (3) The City may place upon the premises such devices as deemed necessary to conduct monitoring and/or sampling of discharges from the premises.
 - (4) The City of Grand Island may require a person to install monitoring equipment as necessary. Sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition at no expense to the City. All devices used to measure storm water flow and quality shall be calibrated to ensure accuracy.
 - (5) Any obstruction to safe and easy access to the premises to be inspected and/or sampled shall be promptly removed at the request of the City and shall not be replaced. The costs of clearing such access shall not be paid by the City.
 - (6) Unreasonable delays in allowing Grand Island City designees access to premises is a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility or premises with a National Pollutant Discharge Elimination System permit to discharge storm water associated with industrial activity commits an offense if the person denies the City reasonable access for the purpose of conducting any activity authorized or required by this ordinance.
 - (7) If a City of Grand Island designee has been refused access to any part of the premises from which storm water is discharged, the City of Grand Island may seek issuance of a search warrant from any court of competent jurisdiction.

§40-15. Best Management Practices

The City of Grand Island may adopt requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drainage system, or waters of the United States of America. The owner or operator of a commercial or industrial establishment shall provide, at the owner or operator's expense, reasonable protection from discharge of prohibited materials or other wastes into the municipal storm drainage system or watercourses through the use of these structural and nonstructural Best Management Practices. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural Best Management Practices to prevent the further discharge of pollutants to the municipal separate storm sewer system. These Best Management Practices shall be part of a storm water pollution prevention plan as necessary for compliance with requirements of any National Pollutant Discharge Elimination System permit.

§40-16. Watercourse Protection

Every person owning property through which a watercourse passes, and 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.

§40-17. Notification of Discharges and Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility, premises, or operation, has information of any known or suspected release of materials which result or may result in illegal discharges or pollutants discharging into storm water, the storm drainage system, or waters of the United States of America, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such release of hazardous materials, said person shall immediately notify emergency response agencies and the City of Grand Island of the occurrence via emergency dispatch services. In the event of a release of non- hazardous materials, said person shall notify the City of Grand Island in person or by phone or facsimile no later than the next business day. Notifications in person, by phone, or by facsimile shall be confirmed by written notice addressed and mailed to the City of Grand Island within three business days of the prior notice. 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. Such records shall be retained for at least three years.

§40-18. Geothermal Water Source Heat Pump Systems.

Geothermal Water Source Heat Pump Systems may be installed and operated within the City of Grand Island, and its two mile extraterritorial jurisdiction, subject to permitting and other applicable requirements of the Grand Island City Code provided that any discharge of the spent water from any such system shall be dedicated to a beneficial use (**ie. Maintaining the water level of a private pond**), and shall not include chemical additives for cleaning or descaling, nor shall it create a threat to public health or safety, a nuisance, or unlawful pollution of waters of the state. In no event shall the spent water from any Geothermal Water Source Heat Pump System be directed toward or allowed to enter into or onto any publicly maintained street right of way, road right of way, ditch, storm sewer system, or sanitary sewer system.

Closed Loop Systems are permitted to be installed and must follow Federal, State, and Local guidelines (whichever are most restrictive). New Open Loop Systems are prohibited in the City of Grand Island and its 2 mile jurisdictional boundary. Any Open Loop System that was previously installed, prior to the implementation of this ordinance, are exempt from these restrictions until the system requires overhaul and/or replacement. It is at that time the new guidelines must be met.

A. Material Requirements.

- (1) Geothermal piping shall have a 50-year warranty.
- (2) All piping shall be installed with tracer wire from the structure over all pipes to alert future owners and excavators to the presence and location of the system.
- (3) Heat transfer fluid used in exchanger lines must be a USP or food grade propylene glycol or calcium chloride solution. Ethylene Glycol **will not** be accepted.
- (4) The system shall include a pressure-based leak detector that will stop the system circulating pumps, should a leak occur.

B. Prohibited Acts.

- (1) It shall be unlawful for any person to install a well to be used for geothermal heat transfer purposes within the City of Grand Island or its two mile extraterritorial jurisdiction without obtaining a permit for said well.
- (2) It shall be unlawful to fail to register any well as required by this Article.
- (3) It shall be unlawful to connect or discharge any water from said well, provided it maintains a beneficial use to the city and/or community, to the city stormwater conveyance system without first obtaining a permit for the connection.
- (4) It shall be unlawful for a person to operate or maintain a Geothermal Water Source Heat Pump System in any manner contrary to the provisions of Grand Island City Code.

§40-19 thru 40-29 Reserved

§40-30. Notice of Violation

Whenever the City of Grand Island finds that a person has violated or failed to meet a requirement of this Ordinance, the City's designee may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (a) The performance of monitoring, analyses, and reporting;
- (b) The elimination of illicit connections or discharges;
- (c) That violating discharges, practices, or operations shall cease and desist;
- (d) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
- (e) Payment of costs to cover administrative and remediation expenses;
- (f) The implementation of source control, treatment, and prevention practices. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator and may be assessed against the real estate or collected by civil action.

§40-31. Appeal of a Notice of Violation

Any person receiving a notice of violation may appeal the determination. The notice of appeal must be received within 10 days from the date of the notice of violation. Hearing on the appeal before the Director of Public Works or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the Director shall be final.

§40-32. Enforcement Measures

If the violation has not been corrected as set forth in the notice of violation, or, in the event of an appeal, within 25 days of the original deadline if the Director upholds the notice of violation, then representatives of the City of Grand Island may enter upon the subject private property and are authorized to take any and all measures necessary to

abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the City's designees or agents to enter upon the premises for the purposes set forth above.

§40-33. Cost Of Abatement Of The Violation

After abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. If the amount due is not paid within 30 days, the City of Grand Island may sue to recover the costs through a civil action or levy and assess the costs against the real estate in the manner of special assessments.

§40-34. Injunctive Relief

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Ordinance. If a person has violated or continues to violate the provisions of this ordinance, the City of Grand Island may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation. Injunctive relief shall be in addition to any other remedy available under this ordinance or any other federal or state law.

§40-35. Violations Deemed A Public Nuisance

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be abated or restored at the violator's expense, in the same manner as other nuisances under the Grand Island Municipal Code.

§40-36. Criminal Prosecution

Any person violating any provision of this ordinance shall, upon conviction, be guilty of an infraction. Each day shall constitute a separate offense and be punishable by a fine of \$100.00. Criminal fines shall be in addition to any civil remedies available under Grand Island Municipal Code.

§40-37. Remedies Not Exclusive

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.