INVER GROVE HEIGHTS
PLANNING COMMISSION AGENDA

TUESDAY, OCTOBER 4, 2016 – 7:00 p.m.
City Council Chambers - 8150 Barbara Avenue

1. CALL TO ORDER

2. APPROVAL OF PLANNING COMMISSION MINUTES FOR SEPTEMBER 20, 2016

3. APPLICANT REQUESTS AND PUBLIC HEARINGS

3.01 CITY OF INVER GROVE HEIGHTS
Public hearing to consider an **Ordinance Amendment** as required by the NPDES MS4 Stormwater Program

Planning Commission Action _____

4. OTHER BUSINESS

5. ADJOURN

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PLANNING COMMISSION MINUTES - CITY OF INVER GROVE HEIGHTS

Tuesday, September 20, 2016 – 7:00 p.m.
City Hall Chambers - 8150 Barbara Avenue

Chair Maggi called the Planning Commission meeting to order at 7:00 p.m.

Commissioners Present:	Elizabeth Niemioja Pat Simon Tony Scales Armando Lissarrague Joan Robertson Dennis Wippermann Annette Maggi Jonathan Weber
Commissioners Absent:	Luke Therrien (excused)
Others Present:	Allan Hunting, City Planner

APPROVAL OF MINUTES

The September 6, 2016 Planning Commission minutes were approved as submitted.

Chair Maggi provided Commissioners with a 2012 memo written by Allan Hunting and Paul Hark in regards to determining if there is a practical difficulty on variances. The Planning Commission is to look only at land use whereas City Council has more latitude and can make decisions based on other factors. She explained that a variance should not be granted unless it meets three factors. Commissioners must first determine if the property owner proposes to use the property in a reasonable manner. If so, then they should move on to Step 2 and if not the variance should not be granted. The second factor is whether the landowner's problem is due to circumstances unique to the property not caused by the landowner. This is in regard to the land itself; not things manmade such as existing buildings. If the answer is no the variance should not be granted. The third factor is whether the resulting structure would be appropriate for the surrounding area.

Commissioner Scales stated there were other things to consider as well.

Chair Maggi agreed, but stated the challenge is often in determining if there is a practical difficulty.

BRIAN AND VICKI DZIEWECZYNSKI – CASE NO. 16-42V

Reading of Notice

Commissioner Simon read the public hearing notice to consider the request for a variance to allow a detached accessory building 1,440 square feet in size whereas 1,000 square feet is the maximum size allowed by code, and a variance to allow a setback of six feet whereas 50 feet is required for structures larger than 1,000 square feet, for the property located at 7030 River Road. 6 notices were mailed.

Presentation of Request

Allan Hunting, City Planner, explained the request as detailed in the report. He advised that the applicant is proposing to add an accessory structure that is 1,440 square feet in size whereas 1,000 square feet is the maximum size allowed, and a variance3 for the garage to be located six feet from the side property line whereas 50 feet is required. The request is to build the accessory

building on an existing foundation that was previously a home. The applicants would be removing an existing shed. The existing foundation is six feet from the property line. Any building over 1,000 square feet requires a 50 foot setback. Staff believes a practical difficulty can be found for the size and location of the proposed building due to the fact that the foundation is existing and the footprint will not be increasing. The Chief Building Official has looked at that foundation and found it to be sound. Staff recommends approval of the variance.

Chair Maggi asked staff to clarify the dotted and non-dotted areas shown on the site plan.

Mr. Hunting explained that the dotted area was an existing concrete slab and the other was a perimeter foundation with a dirt floor.

Chair Maggi asked what the square footage was of the concrete slab.

Commissioner Simon advised it was roughly 24' x 40'.

Commissioner Weber advised it was approximately 960 square feet in size.

Commissioner Niemioja questioned whether having an existing foundation was a practical difficulty and asked whether the former house at that location had been in violation of the ordinance or grandfathered in.

Mr. Hunting did not know the history of the house but advised that if the garage was on the north side it would have met the setback requirements. He stated that in 1998 when the applicants purchased the property the current rules were not in place in regard to maximum size, number, setbacks, etc.

Chair Maggi asked if part of the problem was that by purchasing the second lot and combining them the 50 foot setback kicked in which applies to lots over one acre in size.

Mr. Hunting replied that any structure over 1,000 square feet in size requires a 50 foot setback.

Chair Maggi asked if they could have constructed a 1,000 square foot accessory building if there were two separate lots.

Mr. Hunting replied that no lot can have an accessory structure without a principle structure.

Chair Maggi asked if part of the issue was that the two lots were combined which then allowed an accessory structure of 1,000 square feet which impacts the setback.

Mr. Hunting replied in the affirmative.

Commissioner Robertson stated she did not see any topographical challenge on the lot and questioned whether having an existing foundation makes it an allowable practical difficulty.

Commissioner Scales asked what the minimum size would be if they wanted to build a house on that lot.

Mr. Hunting replied the minimum allowed for a residence would be 1,000 square feet.

Commissioner Scales stated that the practical difficulty is that if they had not combined these properties they could have built a house with a larger garage and never had to request a variance.

Chair Maggi stated that was assuming the garage was on the north side of the house.

Commissioner Scales stated the property owner was being penalized for combining the two properties and questioned why they were struggling to find a practical difficulty.

Commissioner Robertson replied that having a practical difficulty was one of the principle criteria Commissioners must consider when granting variances.

Commissioner Scales referred to the memo from Allan Hunting and Paul Hark and questioned whether they should disregard the many previous requests done in the last couple years that may not have been held to the same standards.

Chair Maggi did not believe there were a lot of recent requests that did not have a practical difficulty, and stated it was the Commission's responsibility to come back to the framework put in place for decision making.

Commissioner Scales questioned whether they had strayed from because it did not quite fitting for our City.

Commissioner Lissarrague stated he understood the rules but felt they should use common sense as well. He stated he saw a practical difficulty as stated by staff, and would want to do the same thing if it was his property. He stated that putting it in another location could create an eyesore for the neighboring property.

Chair Maggi noted there were two variances being requested; one for the setback and one for allowing a building over 1,000 square feet in size. She stated in her opinion the real foundation was 1,000 square feet as she did not consider the dirt portion a foundation.

Commissioner Scales clarified that the concrete slab was 1,000 square feet but the perimeter foundation was 1,440 square feet.

Mr. Hunting advised there was a true footing foundation around the dirt portion on which they would be able to build a structure.

Commissioner Wippermann asked stated the house on the property to the north was fairly close to the property line and questioned to what extent they should be following the guidelines for setbacks in order to provide for proper spacing between buildings from one lot to another. He asked if staff heard from the property owner to the north.

Mr. Hunting replied they had not as the property was vacant. Staff only heard from the property owner to the south.

Opening of Public Hearing

Brian and Vicki Dzieweczynski, 7830 River Road, advised they were available to answer any questions.

Chair Maggi asked the applicant if they read and understood the report.

The Dzieweczynski's replied in the affirmative.

Ms. Dzieweczynski stated the practical difficulty that she sees is that it is an existing foundation that was on the property that they purchased in 1998. She advised they have worked hard to combine the properties and make them look unified. She stated the foundation was not something

they put there, and if it was not there the building could have been somewhere else and they would not have had to go through the variance process. Since it is there they would like to utilize it. She added that their home was built on bedrock; therefore, they had no basement for storage.

Mr. Dzieweczynski stated when they purchased the property Chief Building Official Brian Hoffman was aware of the house that had burned down and advised them they would be able to rebuild on it. Prior to purchasing the adjoining property they had the City look at it and were informed they would have to combine them into one property ID number as they could not have a lot with an accessory structure without a primary structure. At that time they were not aware of the 50 foot setback requirement. When they came in a month and a half ago they were not made aware that they would be applying for a 50 foot setback variance.

Commissioner Wippermann asked how they would incorporate the two-level foundation into an accessory structure.

Mr. Dzieweczynski replied that one portion would be on the 24' x 40' slab then they would go down three steps to the other portion.

Ms. Dzieweczynski stated they plan to have the proposed structure mirror the existing home as much as possible.

Commissioner Lissarrague asked when the requirement for a 50 foot setback for buildings over 1,000 square feet came into effect.

Mr. Hunting replied approximately 2008.

Commissioner Lissarrague stated when the applicants purchased the lot in 1998 they were told they could do certain things but they cannot. He believed that was a practical difficulty and that Commissioners should give some consideration to what they were originally told in 1998.

Commissioner Robertson stated that they were not saying the applicant could not build, just that the size of the proposed structure would be out of compliance with the setback. They still had the option of using a portion of the existing foundation but keeping it 1,000 square feet. She asked the applicants if they had considered a plan that would comply with size and setback regulations.

Mr. Dzieweczynski replied probably not as they want to complement and mirror their existing home.

Commissioner Lissarrague asked the applicants if their conversation in 1998 with the building official was based on rebuilding on the entire 1,440 square foot foundation.

Mr. Dzieweczynski replied in the affirmative.

Commissioner Niemioja asked what size the original plan was before speaking with the building official.

Commissioner Simon replied 1,126 square feet.

Mr. Dzieweczynski stated at that time they were planning on keeping the existing shed and building a 1,126 square foot accessory structure; however, the building office suggested building on the entire 1,440 foundation and removing the existing shed.

Chair Maggi closed the public hearing.

DRAFT

Planning Commission Discussion

Commissioner Simon asked what the regulations were for accessory structures over 1,000 square feet in the R-1C zoning district.

Mr. Hunting replied a lot must be at least 2.5 acres to have a structure over 1,000 square feet.

Chair Maggi stated she was struggling to find a practical difficulty as in her mind she did not consider an existing foundation part of the normal topography of the land. She was also concerned about the significant difference between the 6 foot setback being requested versus the required 50 foot setback.

Commissioner Niemioja stated that codes are continually changing and she did not feel they could make decisions based on the fact that requirements had changed from when they purchased the property. Unless they are specifically grandfathered in residents should have to adapt to the new code. She added that a 1,440 square foot accessory structure seemed extremely large for a relatively small lot. She would feel better if they had continued with the original plan before enlarging it after speaking with the building official.

Chair Maggi stated that historically they have denied requests for a 50% increase in size.

Commissioner Scales stated he has been on the Commission since 2008 during which they have recommended approval of many requests because it was the common sense thing to do. In reference to the variance criteria discussed earlier, he stated that City Council has stated it is no longer relevant all the time

Chair Maggi stated she had never heard Council say that. She reiterated that the Planning Commission's role was different than Council's role and that they could not factor financial considerations into their decision.

Commissioner Scales stated he agreed with the practical difficulty as stated by staff and that although there were two interpretations it did not mean one was right and the other was wrong.

Commissioner Wippermann stated if they went along with staff's recommendation all the time there would be no need for the Planning Commission. He noted they have voted differently than staff on many occasions and he expects it will happen in the future as well.

Commissioner Robertson stated the reason they have a Planning Commission is to have an additional body look at all the considerations. She stated it is clear that accessory buildings greater than 1,000 square feet must be on 2.5 acre properties. When there has been real physical difficulty related to topography Commissioners may have made some slight adjustments. In this instance if the applicant would agree to make some alterations the 6 foot setback would no longer be an issue. She stated in order to approve this request, Commissioners would have to ignore the definition of a practical difficulty as well as existing City Code that equates the size of the property to acreage. She felt those were too big to ignore.

Commissioner Weber stated the fact that the landowner could utilize the existing foundation and save money and time seemed to fulfill the variance criteria requiring that the landowner's problem was due to circumstances unique to the property.

Chair Maggi stated they could not say that because the Planning Commission could not consider financial implications – only land use.

Commissioner Scales stated they still should use common sense.

Commissioner Simon replied that was not how they were supposed to make their decisions.

Commissioner Scales stated that going strictly by the variance criteria and denying everything would make the Planning Commission irrelevant.

Commissioner Niemioja noted they went against staff recommendation at the last meeting and found a practical difficulty and recommended approval.

Commissioner Scales stated that Council will approve this request.

Commissioner Robertson stated that was their purview to do so.

Commissioner Scales stated they use common sense.

Chair Maggi stated that Council has a greater purview and can look at economic and other considerations that the Planning Commission is not allowed to.

Planning Commission Recommendation
Motion by Commissioner Robertson, second by Commissioner Niemioja, to deny the request for a variance to allow a detached accessory building 1,440 square feet in size whereas 1,000 square feet is the maximum size allowed by code, for the property located at 7030 River Road based on the fact that the criteria for a practical difficulty could not be met.

Motion carried (5/3 - Scales, Lissarrague, and Weber).

Commissioner Weber asked if the setback variance was only needed if the building was larger than 1,000 square feet.

Mr. Hunting advised that the Commission still had to act on both variance requests.

Commissioner Robertson asked if they could add a condition to the setback variance request that the building not exceed 1,000 square feet in size.

Mr. Hunting replied that by code it could not exceed 1,000 square feet.

Chair Maggi asked for clarification that a 6 foot setback was allowed for a 1,000 square foot accessory structure.

Mr. Hunting replied in the affirmative. He stated they still had to vote on it though since the applicant applied for two variances.

Commissioner Lissarrague stated he understood why staff took the position they have as it is unusual for there to be an existing foundation on a property.

Motion by Commissioner Scales, second by Commissioner Lissarrague, to approve the request for a variance to allow a setback of six feet whereas 50 feet is required for structures larger than 1,000 square feet, for the property located at 7030 River Road.

Motion carried (6/2 - Wippermann and Simon). This item goes to the City Council on September 26, 2016.

Chair Maggi advised the applicant that City Council would be able to look at different

considerations than the Planning Commission was allowed to.

Mr. Dzieweczynski noted that the second motion was not necessary since a six foot setback would be allowed on a building 1,000 square feet or smaller.

Chair Maggi replied that they had to act on it since two variance requests were submitted.

Chair Maggi asked staff if someone could speak to the Commission about the current approach to practical difficulty across the State.

Mr. Hunting agreed to see if the City Attorney could speak to the Commission about this matter.

Commissioner Simon suggested perhaps someone from the League of Minnesota Cities could come as well.

Mr. Hunting advised he would check on that.

Commissioner Robertson commented that historically in every variance application the Planning Commission has looked at the practical difficulty criteria discussed earlier. She wanted to make sure everyone understood that they have not been freely handing out variances and are all of a sudden getting strict.

Commissioner Scales stated they have been a little more open to look at the individual instance in regard to practical difficulty in the past than what they have tonight, he felt they should use common sense as to what practical difficulty is, and stated there is a variance in almost every neighborhood in the City. He asked staff if the applicant were to separate the two lots again would they be able to build a 1,000 square foot house with a large garage without the need for a variance.

Mr. Hunting replied in the affirmative.

Commissioner Niemioja stated that as a group they examine issues and sometimes see things differently than staff. She advised that although it was logical and financially beneficial to approve the request, the Planning Commission was not allowed to base their decision on financial implications.

OTHER BUSINESS

Chair Maggi asked for clarification of the September 26 special meeting.

Mr. Hunting advised that the meeting will be held in Council Chambers at 4:00 p.m. Each consultant would have 45 minutes to do a presentation and hold a question and answer session. There will be no issues with the Open Meeting Law as the special meeting has already been posted.

The meeting was adjourned by unanimous vote at 7:55 p.m.

Respectfully submitted,

Kim Fox
Recording Secretary

DRAFT

CITY OF INVER GROVE HEIGHTS

Stormwater Ordinance Update – Public Hearing

Meeting Date: October 4, 2016
Item Type: Planning Commission
Contact: Thomas J. Kaldunski, 651-450-2572 for SWD
Prepared by: Thomas J. Kaldunski, City Engineer
Reviewed by:

PURPOSE/ACTION REQUESTED

Public hearing for the Stormwater Ordinance Update.

SUMMARY

The City ordinances currently in place address much of the program requirements of the NPDES MS4 Program. However, due to updates to the MS4 Permit in 2013 by the MPCA, several new requirements and regulatory mechanisms need to be incorporated in order for the City to comply with the revised permit. The three areas requiring updates under the permit requirements include:

- Illicit Discharge Detection and Elimination;
- Construction Site Stormwater Management; and
- Permanent Stormwater Management.

The attached memorandum describes in more detail the nature of the proposed ordinance updates which would result in completion of the updates by the end of 2016.

Staff will present an overview of the requirements as stated in the NPDES MS4 Permit and highlight certain provisions and requirements that have been altered relative to current ordinance language.

Once the public hearing is held, the City Council will conduct the first reading of the ordinance amendment modifying the stormwater ordinances as outlined in the attached proposed ordinance.

TJK/kf
Attachments: SEH Memorandum dated August 1, 2016
Draft Ordinance (9-5-1 through 9-5-12)

SEH

Building a Better World
for All of Us®

MEMORANDUM

TO: Steve Dodge, PE – Assistant City Engineer
City of Inver Grove Heights, MN

FROM: Ron Leaf, PE, - Sr. Water Resources Engineer
SEH

DATE: August 1, 2016

RE: Ordinance Updates Required by the NPDES MS4 Stormwater Program
SEH No. 130798 14.00

The City has been covered under the National Pollutant Discharge Elimination System (NPDES) Municipally Separate Storm Sewer System (MS4) Program since 2003. Over the past 13 years, the program has continued to evolve and expand with new requirements being placed on permittees with the 2013 permit revision. With that permit the City was required to review and update official controls (e.g., standards, policies, ordinances) dealing with three primary provisions of the MS4 Permit:

- Illicit Discharge Detection and Elimination (IDDE),
- Construction Site Erosion and Sediment Controls (CSW), and
- Permanent Stormwater Management (PSW).

The City ordinances currently in place address much of the program requirements of the NPDES MS4 Program. However, due to updates to the MS4 Permit in 2013 by the MPCA, several new requirements need to be incorporated into current city code in order for the City to comply with the revised permit. The City had started a review and update of its stormwater related ordinances in previous years and then put these on hold pending the completion of the NPDES permit revisions.

While the required changes focus on several areas related mostly to the NPDES Permit, there updates to stormwater design standards and regulatory mechanisms also being incorporated into the ordinance updates. The ordinance updates have considered the following state, local and City programs and plans:

- 2013 NPDES MS4 Permit Reauthorization
- Atlas 14 Rainfall Precipitation-Frequency updates
- The City's 3rd and 4th Generation Water Resources Management Plan
- Northwest Expansion Area AUAR (2007) and Update (2014)
- Northwest Area Storm Water Manual (2006)
- Lower Mississippi River Watershed Management Organization Plan (August 2015)
- Eagan Inver Grove Watershed Management Organization Plan (2016)
- Dakota County SWCD Low-Impact Development Guidelines

City ordinances that have been reviewed or will be covered as part of this update include:

- Title 9, Chapter 5 (Stormwater Management). This Chapter update will include a replacement of the entire Chapter 5 and replacement with a new Chapter 5. The technical contents of the portion of the ordinance addressing Illicit Discharges will not be changed. The portion dealing with stormwater design criteria and application requirements will be updated to reflect new requirements.

- Title 9, Chapter 4 - Excavations and Fills (Land Alterations). Staff will review and recommend future updates to be incorporated into this chapter to be consistent with the regulatory mechanisms updated in Chapter 5 - Stormwater Management .

- Title 10, Chapter 13 (Special Use Districts). Several sections in 13B (Shoreland) of this chapter have references to stormwater that will be updated to be consistent with the updated to Title 10, Chapter 5.

- Staff has also reviewed Chapter 10, Chapter 13, Article J for the Northwest Overlay District and have not identified any needed updates to this section.

The schedule will be developed based on feedback from Council, staff and the public. A public hearing will be held with the Planning Commission prior to official readings before City Council. The general schedule and sequence will be reviewed with Council at the Worksession on August 1, 2016.

Council Worksession
Final Ordinances/Updates
Public Notice Published
Public Hearing: Planning Commission
1st Reading: Council
2nd Reading: Council
3rd Reading: Council

CITY OF INVER GROVE HEIGHTS
DAKOTA COUNTY, MINNESOTA
ORDINANCE NO. _____

AN ORDINANCE AMENDING INVER GROVE HEIGHTS CITY CODE SECTIONS 9-5-1 THROUGH 9-5-12 RELATED TO STORMWATER MANAGMENT

THE CITY COUNCIL OF THE CITY OF INVER GROVE HEIGHTS ORDAINS AS FOLLOWS:

Section One. Amendment. Sections 9-5-1 through 9-5-12 of the Inver Grove Heights City Code are hereby amended to read as follows:

~~**9-5-1: STATUTE AUTHORITY:**~~

~~This chapter is adopted pursuant to Minnesota statutes section 462.351 for cities and towns. (1974 Code § 430.01)~~

~~**9-5-2: FINDINGS:**~~

~~The city hereby finds that uncontrolled and inadequately planned use of wetlands, woodlands, natural habitat areas, areas subject to soil erosion and areas containing restrictive soils adversely affects the public health, safety and general welfare by affecting water quality and contributing to other environmental problems creating nuisances, impairing other beneficial uses of environmental resources and hindering the ability of the city to provide adequate water, sewage, flood control and other community services. In addition, extraordinary public expenditures may be required for the protection of persons and property in such areas and in areas which may be affected by unplanned land usage. (1974 Code § 430.03)~~

~~**9-5-3: PURPOSE:**~~

~~The purpose of this chapter is to promote, preserve and enhance the natural resources within the city and protect them from adverse effects occasioned by poorly sited development or incompatible activities by regulating land alterations or development activities that would have an adverse and potentially irreversible impact on water quality and unique and fragile environmentally sensitive land; by minimizing conflicts and encouraging compatibility between land alterations and development activities and water quality and environmentally sensitive lands; and by requiring detailed review standards and procedures for land alterations or development activities proposed for such areas, thereby achieving a balance between urban growth and development and protection of water quality and natural areas. (1974 Code § 430.05)~~

~~**9-5-4: DEFINITIONS:**~~

~~For the purposes of this chapter, the following terms, phrases, words, and their derivatives shall have the meanings stated in this section. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The word "shall" is always mandatory and not merely directive.~~

~~APPLICANT: Any person who wishes to obtain a building permit, preliminary plat approval or an excavation permit.~~

~~CONTROL MEASURE: A practice or combination of practices to control erosion and attendant pollution.~~

~~DETENTION FACILITY: A permanent natural or manmade structure, including wetlands, for the temporary storage of runoff which contains a permanent pool of water.~~

~~EXCAVATION ACTIVITIES: Any excavation or filling activity as regulated by chapter 4 of this title.~~

~~FLOOD FRINGE: The portion of the floodplain outside of the floodway.~~

~~FLOODPLAIN: The areas adjoining a watercourse or water basin that have been or may be covered by a regional flood.~~

~~FLOODWAY: The channel of the watercourse, the bed of water basins, and those portions of the adjoining floodplain that are reasonably required to carry and discharge floodwater and provide water storage during a regional flood.~~

~~HYDRIC SOILS: Soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.~~

~~HYDROPHYTIC VEGETATION: Macrophytic 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.~~

~~LAND ALTERATION: Any change of the land surface including, but not limited to, removing vegetative cover, excavating, filling, grading, and the construction of utilities, roadways, parking areas and structures.~~

~~PERSON: Any individual, firm, corporation, partnership, franchisee, association or governmental entity.~~

~~PUBLIC WATERS: Waters of the state as defined in Minnesota statutes section 103G.005, subdivision 15.~~

~~REGIONAL FLOOD: A flood that is representative of large floods known to have occurred generally in the state and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of a 100-year recurrence interval.~~

~~RETENTION FACILITY: A permanent natural or manmade structure that provides for the storage of stormwater runoff by means of a permanent pool of water.~~

~~SEDIMENT: Solid matter carried by water, sewage, or other liquids.~~

~~STRUCTURE: Any manufactured, constructed or erected building including portable structures and earthen structures.~~

~~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 (3) attributes:~~

~~A. Have a predominance of hydric soils;~~

~~B. Are inundated or saturated by surface or ground water 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, supports a prevalence of such vegetation. (1974 Code § 430.07)~~

~~9-5-5: SCOPE; COMPLIANCE REQUIRED:~~

~~A. Scope: This chapter shall apply to any land alteration requiring any of the following permits or approvals:~~

~~1. A building permit for any new single-family residential dwelling, two-family residential dwelling, multiple-family residential dwelling (3 or more attached dwelling units), commercial building, industrial building or institutional building, except for those properties where there exists a recorded contract or recorded agreement with the city which sets forth a stormwater, grading, drainage and erosion control plan that has been approved by the city;~~

~~2. A preliminary plat;~~

~~3. An excavation permit as regulated by chapter 4 of this title;~~

~~4. Public improvement projects.~~

~~B. Compliance With Provisions: No building permit, preliminary plat, excavation permit or public improvement project shall be approved until approval of a stormwater management plan has been obtained in strict conformance with the provisions of this chapter.~~

~~C. Exemptions: The provisions of this chapter do not apply to:~~

1. ~~Any currently valid building permit, preliminary plat, excavation permit, or public improvement project approved prior to the effective date hereof;~~

2. ~~Construction of agricultural structures or land alterations associated with agricultural uses unless an excavation permit is required by chapter 4 of this title;~~

3. ~~Installation of a fence, sign, telephone, and electric poles and other kinds of posts or poles; or~~

4. ~~Emergency work to protect life, limb, or property. (Ord. 1241, 10-10-2011)~~

~~9-5-6: SUBMISSION REQUIREMENTS:~~

~~A stormwater management plan shall be submitted with all permit applications identified in subsection 9-5-5A of this chapter. Two (2) sets of clearly legible blue or black lined copies of drawings and required information shall be submitted. Drawings shall be prepared to a scale appropriate to the site of the project and suitable for the review to be performed. At a minimum, the scale shall be one inch equals one hundred feet (1" = 100'). The stormwater management plan shall contain the following information, which may be combined into one or more drawings or may be combined with submission requirements of other permits or approvals:~~

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

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

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

   3. ~~Existing topography with a contour interval appropriate to the topography of the land, but in no case having a contour interval greater than two feet (2');~~

   4. ~~A delineation of all streams, rivers, public waters and wetlands located on and immediately adjacent to the site, including any classification given to the water body or wetland by the Minnesota department of natural resources, the Minnesota pollution control agency and/or the United States army corps of engineers;~~

   5. ~~Location and dimensions of existing stormwater drainage 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 water, or wetland, and setting forth those areas of the unaltered site where stormwater collects;~~

6. ~~A description of the soils of the site, including a map indicating soil types of areas of critical erosion to be disturbed as well as a soil report containing information on the suitability of the soils for the type of development proposed and describing any remedial steps to be taken by the developer to render the soils suitable;~~

7. ~~Vegetative cover and clearly delineating any vegetation proposed for removal; and~~

8. ~~100-year floodplain, flood fringes and floodways.~~

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

1. ~~Locations and dimensions of all proposed land disturbing activities and any phasing of those activities;~~

2. ~~Locations and dimensions of all temporary soil or dirt stockpiles;~~

3. ~~Locations and dimensions of all construction site erosion control measures necessary to meet the requirements of this chapter;~~

4. ~~Schedule of anticipated starting and completion date of each land disturbing activity including the installation of construction site erosion control measures needed to meet the requirements of this chapter; and~~

5. ~~Provisions for maintenance of the construction site erosion control measures during construction.~~

C. ~~Plan Of Final Site Conditions: A plan of final site conditions on the same scale as the existing site map showing the site changes including:~~

1. ~~Finished grading shown at contours at the same interval as provided above or as required to clearly indicate the relationship of proposed changes to existing topography and remaining features;~~

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

3. ~~A drainage plan of the developed site delineating in which direction and at what rate storm water will be conveyed from the site and setting forth the areas of the site where storm water will be allowed to collect;~~

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

5. ~~The proposed location of individual sewage treatment systems;~~

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

7. ~~Any other information pertinent to the particular project which, in the opinion of the applicant, is necessary for the review of the project. (1974 Code § 430.11)~~

~~9-5-7: PLAN REVIEW PROCEDURE:~~

~~A. Process: Storm water management plans meeting the requirements of section 9-5-6 of this chapter shall be reviewed by the engineering division in accordance with the standards of section 9-5-8 of this chapter. The director of public works, or designee, shall approve, approve with conditions, or deny the storm water management plan.~~

~~B. Duration: A storm water plan approved in accordance with this chapter shall become void if the corresponding building permit, excavation permit, preliminary plat, or public improvement project expires or becomes invalid.~~

~~C. Conditions: A storm water management plan may be approved subject to compliance with conditions reasonable and necessary to ensure that the requirements contained in this chapter 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 ensure buffering, and require the conveyance for storm water management purposes to the city or other public entity of certain lands or interests therein.~~

~~D. Letter Of Credit: Prior to approval of any storm water management plan, the applicant shall submit a letter of credit or cash escrow to cover the estimated cost of site restoration. The letter of credit or cash escrow amount shall be based on ten thousand dollars ($10,000.00) per acre of gross lot area with a five thousand dollar ($5,000) minimum.~~

~~E. Amendment: A storm water management plan may be revised in the same manner as originally approved. (1974 Code § 430.13)~~

~~9-5-8: APPROVAL STANDARDS:~~

~~No storm water management plan which fails to meet the standards contained in this section shall be approved by the city.~~

~~A. General Criteria:~~

1. ~~An applicant shall install or construct all storm water management facilities necessary to manage increased runoff so that the 2-year and 10-year storm peak discharge rates existing before the proposed land alteration shall not be increased and accelerated. Channel erosion shall not occur as a result of the proposed land disturbing or development activity.~~

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

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

   a. ~~Infiltration of runoff on site, if suitable soil conditions are available for use;~~

   b. ~~Flow attenuation by use of open vegetated swales and natural depressions;~~

   c. ~~Storm water retention facilities; and~~

   d. ~~Storm water detention facilities.~~

4. ~~A combination of successive practices may be used to achieve the applicable minimum control requirements specified in subsection A1 of this section. Justification shall be provided by the applicant for the method selected.~~

B. ~~Storm Water Retention Criteria: Land alterations involving one acre or more of total impervious surface area (existing and proposed) shall require on site storm water retention facilities designed according to the most current technology as reflected in the MPCA publication "Protecting Water Quality In Urban Areas", and shall contain, at a minimum, the following design factors:~~

1. ~~A permanent pond surface area equal to two percent (2%) of the impervious area draining to the pond or one percent (1%) of the entire area draining to the pond, whichever amount is greater.~~

2. ~~An average permanent pool depth of four feet (4') to ten feet (10').~~

3. ~~A permanent pool length to width ratio of three to one (3:1) or greater.~~

4. ~~A minimum protective shelf extending ten feet (10') into the permanent pool with a slope of ten to one (10:1) beyond which slopes should not exceed three to one (3:1).~~

5. ~~A protective buffer strip of vegetation surrounding the permanent pool at a minimum width of ten feet (10').~~

6. ~~All storm water retention facilities shall have a device to keep oil, grease, other floatable material from moving downstream as a result of normal operations.~~

7. ~~Storm water retention facilities for new developments must be sufficient to limit peak flows in each subwatershed to those that existed before the development for the 10-year storm event. All calculations and hydrologic models/information used in determining peak flows shall be submitted along with the storm water management plan.~~

8. ~~All storm water retention facilities must have a means to remove coarse grained particles prior to discharge into a watercourse or storage basin.~~

9. ~~An extended detention basin, existing wetland when in conformance with subsection C of this section, or other storm water management facility may be used in place of a retention pond when a permanent pool of water is not desired with respect to public safety, character of surrounding development, and aesthetics as determined by the director of public works.~~

C. ~~Site Dewatering: Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, upflow chambers, hydrocyclones, swirl concentrators or other appropriate controls as appropriate. Water may not be discharged in a manner that causes erosion or flooding of the site, receiving channels or wetlands.~~

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

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

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

G. ~~Site Erosion Control: The following criteria apply only to construction activities that result in runoff leaving the site:~~

1. ~~Channelized runoff from adjacent areas passing through the site shall be diverted around disturbed areas, if practical. Otherwise, the channel shall be protected as described below. Sheet flow runoff from adjacent areas greater than ten thousand (10,000) square feet in area shall also be diverted around disturbed areas, unless shown to have resultant runoff rates of less than 0.5 ft. 3/sec. across the disturbed area for the 1-year storm. Diverted runoff shall be conveyed in a manner that will not erode the conveyance and receiving channels.~~

2. ~~All activities on the site shall be conducted in a logical sequence to minimize the area of bare soil exposed at any one time.~~

3. ~~Runoff from the entire disturbed area on the site shall be controlled by meeting either subsections G3a and G3b or subsections G3a and G3c of this section.~~

   a. ~~All disturbed ground left inactive for fourteen (14) or more days shall be stabilized by seeding or sodding (only available prior to September 15) or by mulching or covering or other equivalent control measure.~~

   b. ~~For sites with more than ten (10) acres disturbed at one time, or if a channel originates in the disturbed area, one or more temporary or permanent sedimentation basins shall be constructed. Each sedimentation basin shall have a surface area of at least one percent (1%) of the area draining to the basin and at least three feet (3') of depth and constructed in accordance with accepted design specifications. Sediment shall be removed to maintain a depth of three feet (3'). The basin discharge rate shall also be sufficiently low as to not cause erosion along the discharge channel or the receiving water.~~

   c. ~~For sites with less than ten (10) acres disturbed at one time, silt fences, straw bales, or equivalent control measures shall be placed along all sideslope and downslope sides of the site. If a channel or area of concentrated runoff passes through the site, silt fences shall be placed along the channel edges to reduce sediment reaching the channel. The use of silt fences, straw bales, or equivalent control measures must include a maintenance and inspection schedule.~~

4. ~~Any soil or dirt storage piles containing more than ten (10) cubic yards of material should not be located with a downslope drainage length of less than twenty five feet (25') from the toe of the pile to a roadway or drainage channel. If remaining for more than seven (7) days, they shall be stabilized by mulching, vegetative cover, tarps or other means. Erosion from piles which will be in existence for less than seven (7) days shall be controlled by placing straw, bales or silt fence barriers around the pile. In-street utility repair or construction soil or dirt storage piles located closer than twenty five feet (25') of a roadway or drainage channel must be covered with tarps or suitable alternative control if exposed for more than seven (7) days, and the storm drain inlets must be protected with straw, bale or other appropriate filtering barriers.~~

H. ~~Wetlands: Existing wetlands may be used for storm water management purposes, provided the following criteria are met:~~

1. ~~The wetland shall not be classified as a group I or II water within the city water resource management plan.~~

2. ~~A protective buffer strip of natural vegetation at least ten feet (10') in width shall surround all wetlands.~~

3. ~~A sediment trapping device or area that is designed to trap sediments 0.5 millimeters in size or greater with a trap volume size based upon a prescribed maintenance schedule shall be installed prior to discharge of storm water into the wetlands.~~

4. ~~The natural outlet control elevation of the wetlands, if it is not a DNR public water, shall not be changed except when either:~~

   a. ~~The outlet is intended to restore the wetland to its original elevation;~~

   b. ~~The wetland basin is landlocked and the artificial outlet control is placed no lower than one and one-half feet (1.5') below the ordinary high water mark;~~

   c. ~~The proposed level control is identified in the city water resource management plan; or~~

   d. ~~The level change is approved by a technical evaluation panel convened pursuant to the state wetland conservation act of 1991 (WCA).~~

5. ~~The water fluctuation from storm water shall not be increased over what occurs naturally, except as provided in subsection H4c of this section.~~

6. ~~The wetland shall not be a protected fen.~~

7. ~~Wetlands shall not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas in accordance with the WCA. When wetland replacement is required, it shall be guided by the following principles in descending order of priority:~~

   a. ~~Avoiding the direct or indirect impact of the activity that may destroy or diminish the wetland;~~

   b. ~~Minimizing the impact by limiting the degree or magnitude of the wetland activity and its implementation;~~

   c. ~~Rectifying the impact by repairing, rehabilitating, or restoring the affected wetland environment;~~

   d. ~~Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the activity; and~~

   e. ~~Compensating for the impact by replacing or providing substitute wetland resources or environments.~~

8. ~~If the wetland is a DNR public water, all necessary permits from the DNR shall be obtained.~~

~~I. Models/Methodologies/Computations: Hydrologic models and design methodologies used for the determination of runoff and analysis of storm water management structures shall be approved by the director of public works. Plans, specifications and computations for storm water management facilities submitted for review shall be sealed and signed by a registered professional engineer. All computations shall appear on the plans submitted for review, unless otherwise approved by the director of public works.~~

~~J. Watershed Management Plans/Ground Water Management Plans: Storm water management plans shall be consistent with adopted watershed management plans and ground water management plans prepared in accordance with Minnesota statutes sections 103B.231 and 103B.255, respectively, and as approved by the Minnesota board of water and soil resources in accordance with state law. (1974 Code § 430.15)~~

~~9-5-9: FEE IN LIEU OF FACILITIES:~~

~~A. Fee In Lieu: In lieu of the storm water management facilities required in section 9-5-8 of this chapter, the city may allow an applicant to make a monetary contribution to the development and maintenance of community storm water management facilities designed to serve multiple land disturbing and development activities when consistent with the city water resource management plan.~~

~~B. Calculation Of Fee: The amount of monetary contribution shall be based on twenty five cents ($0.25) per square foot of total impervious surface area (existing and proposed) on the subject property. For preliminary plats, an estimated impervious coverage per lot, subject to the approval of the director of public works, shall be included in the total impervious surface area calculation.~~

~~C. Payment Of Fee: Payment of a monetary contribution shall occur as follows:~~

~~1. Building permit: Upon issuance of a building permit.~~

~~2. Excavation permit: Upon issuance of an excavation permit.~~

~~3. Preliminary plat: Upon approval of the final plat or commencement of land alteration, whichever occurs first. (1974 Code § 430.17)~~

~~9-5-10: MAINTENANCE STANDARDS:~~

~~All storm water management facilities shall be designed to minimize the need of maintenance, to provide access for maintenance purposes, and to be structurally sound. In addition, the following maintenance standards shall apply:~~

~~A. All storm water detention ponds shall be maintained to ensure continued effective removal of pollutants from storm water runoff. In addition, upon fifty percent (50%) of the pond's original design volume being filled with sediment, the sediment shall be removed and the pond restored to its original design.~~

~~B. The director of public works, or designated representative, shall inspect all storm water management facilities during construction, during the first year of operation and at least once every five (5) years thereafter.~~

~~C. The applicant shall provide all necessary easements upon the subject property for inspection and maintenance purposes of stormwater management facilities as determined by the director of public works.~~

~~D. Stormwater management facilities serving a single-family residential area or subdivision, but more than one single-family lot, shall be maintained by the city. The cost incurred by the city for maintenance of said facilities shall be assessed or levied through a special stormwater taxing district against the properties contributing stormwater runoff to or through the facility.~~

~~E. Stormwater management facilities serving a multiple-family residential building or development; a commercial, industrial or institutional building or development; or an individual parcel shall be maintained by the property owner on which the facility is located, unless it is determined by the director of public works that it is in the best interests of the city for the city to maintain such facilities. If the city is to maintain the stormwater management facilities, the cost incurred by the city for the maintenance may be assessed or levied as described in subsection D of this section. (1974 Code § 430.19)~~

~~9-5-11: PENALTY:~~

~~Any person, firm or corporation violating any provision of this chapter shall be fined as provided in section 1-4-1 of this code, and a separate offense shall be deemed committed on each day during or on which a violation occurs or continues. (1974 Code § 430.21; amd. 2008 Code)~~

~~9-5-12: CONFLICTING PROVISIONS:~~

~~In the event of any conflict between the provisions of this chapter and the provisions of this code, the more restrictive standard prevails. (1974 Code § 430.23)~~

9-5-1: AUTHORIZATION:

This Ordinance is adopted pursuant to Minnesota Statutes Section 462.351 for cities and towns (1990).

Nothing in this ordinance shall be construed to limit the existing authority of the City to enforce rules and regulations in place. This ordinance shall be cumulative to and in furtherance of any statutory, common law, or other legal right, duty, power, or authority possessed by the City. Compliance with this ordinance or any permit or plan approval rendered hereunder, shall not excuse any person from compliance with any other federal, state or local law, ordinance, regulation, rule or order.

Any powers granted to, or duties imposed upon the Director of Public Works, may be delegated by the Director of Public Works to other city personnel.

9-5-2: FINDINGS:

The City of Inver Grove Heights, hereby finds that uncontrolled and unmanaged stormwater and snowmelt runoff can have significant adverse impacts upon water resources; and can adversely affect the health, safety, property and general welfare of the community, and diminish the public enjoyment and use of natural resources. Specifically, runoff can:

A. Cause erosion to exposed soil resulting in loss of topsoil and deposition of sediments.

B. Carry nutrients, pathogens, organic matter, heavy metals, toxins, and other pollutants to lakes, streams, and wetlands.

C. Diminish the capacity of water resources to support recreational and water supply uses and reduces the natural diversity of plant and animal life.

D. Clog existing drainage systems, increasing maintenance problems and costs.

E. Cause bank and channel erosion.

F. Increase downstream flooding.

G. Reduce groundwater recharge, which may diminish stream base flows and lower water levels in lakes, ponds, and wetlands.

H. Contaminate drinking water supplies.

I. Increase risk of property damage and personal injury.

Further, effective stormwater pollution prevention, addressing the following issues, depends on proper planning and design, the timely installation and maintenance of site and situation of appropriate best management practices (BMPs), and prompt and appropriate response upon discovery of previously unknown pollutant sources.

9-5-3: PURPOSE:

The purpose of this ordinance is to set forth minimum requirements for managing the quantity and quality of runoff from all types of land uses throughout the City to achieve the following objectives:

A. Protect, preserve, and use natural surface and groundwater storage and retention systems;

B. Improve the quality of stormwater runoff reaching surface water resources within the City and the Mississippi River by reducing nonpoint source pollution (including sediment) carried as stormwater runoff;

C. Minimize flood damage to residential, business, commercial and public structures and property, and protect against increased flooding caused by land disturbing activities and other projects;

D. Reduce volumes of stormwater runoff and the amount of impervious surfaces in the developed parts of the City;

E. Limit the rates and volumes, and increase the treatment of stormwater runoff, by managing stormwater runoff as close to its source as possible and mimicking the system's natural hydrology;

F. Minimize flood damage to residential, business, commercial, and public structures and property, and protect against increased flooding caused by land disturbing activities and other projects;

G. Minimize erosion and sedimentation;

H. Minimize damage from sediments resulting from eroded soil;

I. Regulate land-disturbing activities to protect against erosion and sedimentation;

J. Implement soil protection and sedimentation controls to maintain health, safety, and welfare;

K. Protect and enhance fish and wildlife habitat and water recreational facilities; and

L. Secure the other benefits associated with proper management of surface and ground water.

9-5-4: DEFINITIONS:

Unless specifically defined below, the words or phrases used in this chapter shall have the same meaning as they have in the Minnesota Stormwater Manual and if not defined there, as they are defined in common usage. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The words "shall" and "must" are always mandatory and not merely directive.

APPLICANT: Any person or entity that applies for any permit for a project that includes a Land Disturbing Activity. Applicant also means that person's agents, employees, and others acting under that person's direction.

BEST MANAGEMENT PRACTICES (BMPs): Erosion and sediment control and stormwater management practices that are the most effective and practicable means of controlling, preventing, and minimizing the degradation of surface water, including construction phasing, minimizing the length of time soil areas are exposed, and other management practices published by state or designated area-wide planning agencies. BMPs include integrated management practices (IMP), which are small-scale, distributed, onsite stormwater management devices.

Examples of BMPs can be found in the current versions of the Inver Grove Heights Stormwater Manual – Northwest Area (2006), the Minnesota Pollution Control Agency's Minnesota Stormwater Manual.

BUFFER: A protective vegetated zone located adjacent to a natural resource, such as a lake, stream or wetland, which is subject to direct or indirect human alteration. Such a buffer strip is an integral part of protecting an aquatic ecosystem through filtering pollutants and providing adjacent habitat. For a stream, the width of a buffer strip is the width along each bank of the stream. Therefore, a 30 foot wide stream with 100-foot wide buffer strips has a total width of 230 feet. Buffer vegetation may include preserving existing predevelopment vegetation and/or planting locally distributed native Minnesota trees, shrubs and grassy vegetation.

CITY PLAN: Any City adopted or approved planning document such the Comprehensive Plan, Water Resources Management Plan, Inver Grove Heights Stormwater Manual – Northwest Area (2006), land use plan, or other.

CONSTRUCTION ACTIVITY: A disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated storm water runoff, leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling and excavating.

CONVEYANCE: A structure or feature used for transferring water from one location to another.

DESIGN STORM: A rainfall event of specified size and return frequency that is used to calculate the runoff volume and peak discharge rate and is used to measure the performance of stormwater management practices.

DISCHARGE: The release, conveyance, channeling, runoff, or drainage of stormwater, including snowmelt, into a receiving water resource.

DRAINAGEWAYS: Any natural or constructed channel which provides a course for water flowing either continuously or intermittently.

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

EROSION AND SEDIMENT CONTROL PRACTICE (ESC): The management procedures, techniques, and methods to control soil erosion and sedimentation.

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

EROSION AND SEDIMENT CONTROL TECHNICIAN (ESC Tech): For the purposes of construction site erosion and sediment control, the person or persons designated by the Contractor who have successfully completed ESC Training from the University of Minnesota; Minnesota Department of Transportation Certification; Minnesota Erosion Control Association Training; or other training recognized by the MPCA as meeting the requirements of the NPDES Construction Stormwater Permit.

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

FINAL STABILIZATION: Final stabilization means that:

A. All soil disturbing activities at the site have been completed; and

B. A uniform perennial vegetative cover with a density of seventy-five (75) percent of the native background vegetative cover for unpaved areas has been established, or equivalent permanent stabilization measures have been employed.

Simply sowing grass seed is not considered final stabilization.

FLOOD EVENT (100-year): The precipitation or snowmelt runoff event which has a 1% chance of occurring at a given location within any one-year time period.

FLOOD LEVEL (100-year): The peak water surface elevation of an inundation area or basin resulting from a 100-year flood event.

FLOOD FRINGE: The portion of the floodplain outside of the floodway.

FLOODPLAIN: The areas adjoining a watercourse or water basin that have been or may be covered by a regional flood.

FLOODWAY: The channel of the watercourse, the bed of water basins, and those portions of the adjoining floodplain that are reasonably required to carry and discharge floodwater and provide water storage during a regional flood.

ILLEGAL DISCHARGE: Any direct or indirect non-storm water discharge to the storm drain system.

ILLICIT CONNECTIONS: An illicit connection is defined as either of the following:

A. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyance which allows any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or

B. Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

IMPERVIOUS SURFACE: A constructed hard surface that either prevents or retards the entry of water into the soil, and causes water to run off the surface in greater quantities and at an increased rate of flow than existed prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

INFILTRATION: Flow of water from the land surface into the subsurface.

INLET PROTECTION: Preservation of the integrity and protection from erosion of the area where water enters into a treatment area usually by vegetation or armoring.

INUNDATION AREA OR BASIN: A low lying area that is subject to periodic flooding. Examples include wetlands, ponds, lakes, streams, open channels, or any low lying area or basin.

LAND DISTRUBING ACTIVITY: Any land change that may result in soil erosion from water or wind and the movement of sediments into or upon waters or lands within the City's jurisdiction or into and adjacent jurisdiction. This may include, but is not limited to:

A. A disturbance to the land that results in a change in the topography.

B. Disturbance of the existing soil cover (both vegetative and non-vegetative cover).

C. A disturbance of the existing soil topography that may result in accelerated stormwater runoff.

D. A pavement rehabilitation project that removes the pavement and exposes the subgrade base material (a partial depth mill and overlay project is not considered a land disturbing activity).

Land disturbing activity includes clearing and grubbing, grading, excavating, transporting and filling of land for all new construction and redevelopment. Ongoing operations and maintenance

activities for existing facilities such that any single activity does not exceed project sizes specified in section 9-5-6 of this chapter are not considered land disturbing activity.

LANDLOCKED BASIN: A basin that does not discharge under back-to-back 100-year, 24-hour rainfall events.

LID (Low Impact Development): An innovative stormwater management approach with a basic principle that is modeled after nature by managing rainfall at the source.

MPCA: Minnesota Pollution Control Agency.

NATURAL OVERFLOW ELEVATION: The low point on the landscape where water will leave a depression or basin.

NORMAL WATER LEVEL (NWL): The water level in a natural water body or constructed pond having an outlet or overflow control structure that is the lowest water level held by the outlet or overflow structure, or for land locked basins, the elevation that may be attained naturally by infiltration, evaporation, or transpiration often demarked by a change in vegetation from terrestrial to aquatic. For basins with piped outlets, the NWL is the invert elevation of the outlet pipe.

NRCS: Natural Resources Conservation Service.

OPERATOR: The person (usually the general contractor), designated by the owner, who has day-to-day operational control and/or the ability to modify project plans and specifications related to the stormwater management plan.

ORDINARY HIGH WATER LEVEL (OHW): Minnesota Statute 103G.005, subdivision 14 states that the Ordinary High Water level means the boundary of water basins, watercourses, public waters, and public waters wetlands, and:

A. the ordinary high water level is an elevation delineating the highest water level that has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial;

B. for watercourses, the ordinary high water level is the elevation of the top of the bank of the channel; and

C. for reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

The term ordinary high water mark is further defined in Minnesota Rule 6120.2500, subpart 11, as amended from time to time.

Ordinary high water marks are determined by the Minnesota Department of Natural Resources' area hydrologist.

OWNER: The person or party possessing the title of the land on which the construction activities will occur; or if the construction activity is for a lease holder, the party or individual identified as the lease holder; or the contracting government agency responsible for the construction activity.

PERMANENT COVER: Means "final stabilization." Examples include vegetative cover composed primarily of grasses, and hard surfaces, such as gravel, asphalt, and concrete. See also the definition of "final stabilization.

PLANNED UNIT DEVELOPMENT: A development of land that is under unified control and is planned and developed as a whole in a single development operation or programmed series of development stages. The development may include streets, circulation ways, utilities, buildings, open spaces, and other site features and improvements.

RATE CONTROL: Controlling the rate that stormwater is released from localized holding areas into larger conveyance systems.

RECHARGE: The addition of water to an aquifer by natural infiltration or artificial means.

REDEVELOPMENT: Any construction, alteration, or improvement that disturbs land on sites where existing land use is commercial, industrial, institutional, residential or linear projects including road or trail construction.

REGIONAL FLOOD: A flood that is representative of large floods known to have occurred generally in the state and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of a 100-year recurrence interval.

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

SHORELAND DISTRICT OR SHORELAND: All lands located within the following distance from the ordinary high water level of a public water:

A. 1,000 feet from a lake pond or reservoir;

B. 300 feet from a river or stream.

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

STEEP SLOPE: Land where agricultural activity or development is either not recommended or described as poorly suited due to slope steepness and the site's soil characteristics, as mapped and described in available county soil surveys or other technical reports, unless appropriate design and construction techniques and farming practices are used in accordance with the provisions of this ordinance. Where specific information is not available, steep slopes are lands having average slopes over 18 percent, as measured over horizontal distances of 50 feet or more, that are not bluffs.

STORMWATER MANAGEMENT PLAN: A joint stormwater management and erosion and sediment control plan that when implemented will provide for both temporary and permanent control of soil erosion on a parcel of land, prevent off-site non-point source pollution, and control stormwater rates and volumes.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP): A plan for storm water discharge that includes erosion prevention measures and sediment controls that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site nonpoint pollution.

STRUCTURE: Anything manufactured, constructed or erected which is normally attached to or positioned on land, including portable structures, earthen structures, roads, parking lots, and paved storage areas.

SUBDIVISION: Any tract of land divided into building lots for private, public, commercial, industrial, etc. development. Minnesota Rule 6120.2500, subpart 17 defines subdivision as, ". . . land that is divided for the purpose of sale, rent, or lease, including planned unit development."

SWCD: Soil and Water Conservation District.

TOTAL MAXIMUM DAILY LOAD (TMDL): The amount of a pollutant from both point and nonpoint sources that a waterbody can receive and still meet water quality standards.

WETLANDS: Defined in Minn. R. 7050.0130, subp. F and includes those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state; to be a wetland the area must meet wetland criteria for soils, vegetation, and hydrology as outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual.

9-5-5: SCOPE; COMPLIANCE REQUIRED:

A. Applicability:

1. All applicants for a building permit, excavations and fillings permit, right of way excavation permit, right of way utility permit, wetland management permit, subdivision approval, planned unit development, or administrative lot split shall be in compliance

with the applicable erosion and sediment control and stormwater management requirements of this chapter.

2. All land disturbing activities and other construction activity disturbing more than 1,000 square feet of land, or more than 50 cubic yards of excavation or fill must prepare and submit an erosion control plan as per subsection 9-5-6(A) of this chapter, and be in compliance with the plans approved for the project.

3. Land disturbing activities and other construction work disturbing a cumulative total of more than 5,000 square feet of land as of the date of this ordinance, or more than 100 cubic yards of excavation or fill must prepare and submit an erosion control plan and a stormwater management plan as per subsection 9-5-6(B) of this chapter, and be in compliance with the plans approved for the project.

4. Private roads or driveways on slopes any part of which exceeds 10% not part of a project requiring a stormwater management plan shall be in compliance with the erosion and sediment control design standards of this chapter.

5. Linear electric, telephone, cable television, utility lines or individual service connections to these utilities in excess of 1,000 feet in length shall be in compliance with the erosion and sediment control requirements of this chapter.

6. No land disturbing activities shall be permitted on steep slopes unless special arrangements and protective measures are developed as part of an erosion and sediment control plan, and approved by the City.

7. Harvesting or removal of silvicultural (forestry) crops shall be in compliance with an erosion and sediment control plan approved for the project and follow the guidelines set forth by the Minnesota Forest Resources Council's publication Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers (1999, Minnesota Forest Resources Council, St. Paul, Minnesota).

8. No building permit shall be issued, nor shall a subdivision be approved, until the erosion control plan and/or stormwater management plan has been approved as applicable or a waiver of these requirements has been obtained in conformance with the provisions of this chapter.

9. Any project impacting wetlands within the City must follow and meet the requirements of the Wetland Conservation Act and the additional requirements in the City's Northwest Area Stormwater Plan.

10. All projects shall protect, preserve and use natural surface and groundwater storage and retention systems.

B. Compliance with Other Plans or Regulations: In the event that any provision of this Chapter conflicts with any other applicable plan or regulation, the more restrictive regulation shall apply.

C. Joint Responsibility: The owner and the general contractor shall both be identified on the stormwater management plan permit application. The general contractor who signs the application is jointly responsible with the owner for compliance with all permit conditions.

D. Exemptions: The provisions of this chapter do not apply to:

1. Cemetery graves;

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

3. Any currently valid building permit, preliminary plat, excavations and fillings permit, or public improvement project approved prior to the effective date of this ordinance;

4. Stormwater management requirements shall not apply to construction on individual lots within a residential subdivision previously approved by the City, provided the activity complies with the original common plan of development;

5. Installation of fence, sign, telephone, and electric poles, except as in subsection 9-5-5(A)(5) of this chapter;

6. Any part of a subdivision if a plat for the subdivision has been approved by the City on or before the effective date of this ordinance;

7. Additions, alterations, enlargements, or changes to an existing single- or two-family dwelling, if they do not exceed 1,000 square feet of land disturbance or 50 cubic yards of excavation or fill;

8. Drain tiling, tilling, planting, or harvesting of agricultural or horticultural crops except as specifically identified and such activities shall implement SWCD and NRCS approved erosion control practices; and

9. All maintenance, repair, resurfacing and reconditioning activities of existing road, bridge and highway systems which do not involve land disturbing activities outside of the existing surfaced roadway area.

E. NPDES General Stormwater Permit for Construction Activity: Land disturbing activities disturbing equal to or greater than one acre of land are required to obtain a Minnesota

NPDES General Stormwater Permit for Construction Activity in addition to complying with requirements of the City.

F. NPDES Multi-Sector General Permit for Industrial Activity: Facilities engaged in the activities defined in the permit are required to apply for permit coverage to the MPCA and follow the permit requirements applicable to the type(s) of industrial activity at the facility.

G. Owner or Operator Changes: For storm water discharges from construction activities where the owner or operator changes, the new owner or operator can implement the original plan created for the project, or develop and implement their own SWPPP. The new owner or operator must notify the Director of Public Works of permit transfer/modification within 7 days of assuming control of the site or commencing work on-site, or of the legal transfer, sale or closing on the property.

H. Waiver: The City Council may waive any requirement of this chapter that is within the City's jurisdiction upon making a finding that compliance with the requirement will involve an unnecessary hardship and the waiver of such requirement will not adversely affect the standards and requirements set forth. The City Council 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 said standards and requirements.

9-5-6: APPLICATION PROCEDURES:

The application for the permit shall be made in writing on such form as the City may from time to time designate, and shall include such information as may be required by the project scope as specified in section 9-5-5 of this chapter and as set forth herein. For all submittals and plans, the preparer shall have the applicable Minnesota professional license or certification and provide the information on the plans and documents.

A. Erosion and Sediment Control Plan Application Procedures:

1. A written application for erosion and sediment control plan approval, along with the proposed erosion and sediment control plan, shall be filed with the Director of Public Works, when applicable as per subsection 9-5-5(A)(2) of this chapter. The application shall include a statement indicating the purpose for which the approval is requested, that the proposed use is permitted by right or as an exception in the underlying zoning district, and adequate evidence showing that the proposed use will conform to the standards set forth in this ordinance.

2. An electronic (PDF format) set of drawings and required information shall be submitted to the Director of Public Works and shall be accompanied by all applicable fees.

3. The erosion and sediment control plan must be reviewed by the Director of Public Works prior to issuance of a permit.

4. Erosion and sediment control plan content. At a minimum, the erosion and sediment control plan shall contain the information in items 5 through 9 below, for all work, except as determined otherwise by staff.

5. Identification and description:

   a. Applicant's name and address;

   b. Legal description and address;

   c. Names, addresses, and phone numbers of the primary contact, record owner, and an agent, land surveyor, and engineer, if any;

   d. Names, addresses, and phone numbers of the primary contact for the project general contractor. If general contractor is not known at time of application, such information shall be submitted prior to the start of any land disturbing activities;

   e. General location map; and

   f. Date of preparation on any maps provided.

6. Site Plan(s) shall include:

   a. Boundary lines of existing and proposed plan;

   b. Existing and proposed permanent and temporary drainage, utility, and other easements;

   c. Existing and proposed zoning classifications for land within and abutting the development;

   d. Acreage and lot dimensions;

   e. Site map with existing and proposed topography to a 1 foot or 2 foot contour interval, final grades, including dividing lines and direction of flow for all pre-and post-construction stormwater runoff drainage areas located within the project limits. The site map(s) must also include existing and proposed impervious surfaces and soil types. This information must be shown extending at least 100 feet beyond property lines or as necessary to show the ultimate drainage features;

   f. Location of existing and proposed roads, property lines and structures;

   g. Location and dimensions of existing and proposed natural waterways and stormwater drainage systems;

h. Location of existing natural water bodies including lakes, streams, and wetlands on or immediately adjacent to property, as well as normal water level and ordinary high water level (if available), including all surface waters and existing wetlands, within one-half mile from the project boundaries which will receive stormwater runoff from the construction site, during or after construction. Where surface waters receiving runoff associated with construction activity will not fit on the plan sheet, they must be identified with an arrow, indicating both direction and distance to the surface water. The plan must identify if the surface water is a special water or impaired water; and

i. Vegetative cover, wooded areas, and a clear delineation of any vegetation proposed for removal.

7. A site construction plan including:

   a. Locations and dimensions of all proposed land disturbing activities;

   b. Locations and dimensions of all temporary soil or dirt stockpiles or areas where stockpiles may be placed during construction;

   c. Location of areas where construction will be phased to minimize duration of exposed soil areas; and

   d. Locations of areas not to be disturbed. Buffer zones must be described and identified on plan sheets or project maps in the erosion and sediment control plan.

8. Completed erosion and sediment control plan specifying the erosion and sediment control practices to be utilized including the following:

   a. Location and type of all temporary and permanent erosion prevention and sediment control BMPs along with procedures to be used to establish additional temporary BMPs as necessary for the site conditions during construction;

   b. Standard plates and/or specifications for the BMPs used on the project must be included in the final plans and specifications for the project;

   c. Estimated quantities tabulation must be included for all erosion prevention and sediment control BMPs in the erosion and sediment control plan, e.g., lineal feet of silt fence, square yards of erosion control blanket, etc.;

   d. BMPs for dewatering activities;

   e. Management of solid and hazardous wastes; and

   f. Computations and documentation regarding the sizing and location of temporary sediment basins.

9. Both the applicant and the contractor shall sign the erosion and sediment control plan certifying their understanding of the measures and that penalties may be exacted by the Director of Public Works for failure to comply with the measures agreed upon.

B. Stormwater Management Plan Application Procedures:

1. A written application for stormwater management plan approval, along with the proposed stormwater management plan, the stormwater pollution prevention plan (SWPPP) if required by the NPDES General Construction Permit, erosion and sediment control plan as per subsection 9-5-6(A) of this chapter, and site construction plan, shall be filed with the Director of Public Works, when applicable, as per subsection 9-5-5(A)(3) of this chapter. The application shall include a statement indicating the purpose for which the approval is requested, that the proposed use is permitted by right or as an exception in the underlying zoning district, and adequate evidence showing that the proposed use will conform to the standards set forth in this ordinance.

2. Prior to applying for approval of a stormwater management plan, an applicant may have the stormwater management plan reviewed by the appropriate departments of the City. The SWPPP may be substituted for applicable portions of the stormwater management plan.

3. The stormwater management plan must be reviewed and approved by the Director of Public Works prior to issuance of a permit.

4. An electronic (PDF format) set of drawings and required stormwater management plan information shall be submitted to the Director of Public Works and shall be accompanied by all applicable fees.

5. Stormwater Management Plan Content:

   a. If the project disturbs equal to or greater than one acre of land, the stormwater management plan shall contain the information required for compliance with the most recent requirements for a Storm Water Pollution Prevention Plan (SWPPP) as part of the Minnesota Pollution Control Agency's NPDES/SDS "Application for General Stormwater Permit for Construction.

      A copy of the NPDES General Construction Permit must be provided within seven days of receipt.

   b. The stormwater management plan and the site construction plan shall meet all of the requirements set forth in section 9-5-9 of this chapter.

   c. The owner must have an approved stormwater management plan prior to conducting any land disturbing activity. The SWPPP must be a combination of narrative, plan

sheets and, if appropriate, standard detail sheets that address the foreseeable conditions, at any stage in the construction or post construction activities.

d. Site Plan(s) shall including all the information listed in Section 9-5-6 (A)(6)-(7):

e. A site construction plan including all the information listed in Section 9-5-6 (A)(7).

f. Owners and operators shall ensure either directly or through coordination with other permitees that their plan meets all terms and conditions of this permit and that their activities do not render another party's erosion and sediment control and stormwater management plans ineffective.

g. A storm water facility maintenance agreement (SWFMA) indicating the responsible party or parties charged with the long-term operation and maintenance, repair, or replacement of any privately owned stormwater conveyance and BMP facilities. SWFMA shall also include information on the intended final ownership of the properties containing such facilities and the means by which inspection, operation, maintenance, repair, or replacement shall be funded and accomplished. The SWFMA shall specify the types and frequencies of routine and major maintenance activities. An annual inspection report on maintenance activities and inspections shall be submitted to the Director of Public Works by January 1st of each year for activities completed in the previous 12 month period.

h. Lot sizes, layout, numbers and preliminary dimensions of lots and blocks.

i. Minimum building setback lines as required by the zoning ordinance.

j. Areas and size of areas other than streets, alleys, pedestrian ways and utility easements, intended to be dedicated or reserved for public use.

k. Finished grading shown as 2 foot contours to clearly indicate the relationship of proposed changes to existing topography and remaining features.

l. A drainage plan of the developed site delineating in which direction and at what rate stormwater will be conveyed from the site and setting forth the areas of the site where stormwater will be allowed to collect.

m. Location of proposed public sewer (storm and sanitary) and water mains.

n. A landscape plan, drawn to an appropriate scale, including dimensions and distances and the location, type, size and description of all proposed landscape materials and proposed ground cover (final stabilization) which will be added to the site as part of the development.

o. For bioretention systems, provide a plant palette of native vegetation species to be used and specify the size and spacing of plants.

p. Calculations for stormwater runoff volume, peak discharge velocities, and peak flow rates for the 2-yr, 24-hour event, 10-yr, 24-hour event, and 100-yr, 24-hour event.

q. Normal water level, 100-year high water level, and emergency overflow elevations for ponding areas on the site.

r. Any other information pertinent to the particular project that, in the opinion of the Director of Public Works, is necessary for the review of the project.

6. Alteration of the course, current, or cross-section of drainageways: For land disturbing activities that alter natural or constructed drainageways, the stormwater management plan shall additionally contain the following information:

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

   b. Bankfull discharge rate (typically, the 1.5 year recurrence interval) of creek or stream if there is a waterway on the site or if the site discharges directly to a waterway; and

7. Models/Methodologies/Computations: Hydrologic and/or hydraulic models, calculations and design methodologies used for determining runoff characteristics and analyzing stormwater management structures. Plans, specifications and computations for stormwater management facilities submitted for review shall be signed by a registered professional engineer.

8. Legal documents: Legal documents for securing temporary or permanent easements as necessary shall be submitted for review.

9. Record Drawings for BMPs: All BMPs less than 200 square feet shall be located with a single survey point with the elevation and coordinates taken in the bottom center of the BMP. Larger BMPs shall be located with sufficient survey points to define the shape of the BMP.

9-5-7: EROSION AND SEDIMENT CONTROL PLAN STANDARDS AND APPROVAL:

A. Approval: The applicant must develop an erosion and sediment control plan. The erosion and sediment control plan shall be completed prior to submitting any permit applications and prior to conducting any construction activity. The erosion and sediment control plan must be a combination of narrative, plan sheets and if appropriate standard detail sheets that address the foreseeable conditions, at any stage in the construction or post construction activities. The plan must include a description of the nature of the construction activity and the anticipated

schedule of activities. The plan must address the potential for discharge of sediment and/or other potential pollutants from the site.

B. Compliance with Other Plans: For any project disturbing one or more acres of land, all erosion and sediment control plans must be prepared by a qualified individual, conform to the MPCA's NPDES General Permit to Discharge Stormwater from Construction Sites, and incorporate the appropriate ESC BMPs described in the Minnesota Stormwater Manual.

C. Site Erosion Control Design Standards: The erosion and sediment control plan requirements must be incorporated into the project's final plans and specifications and/or project documentation, as appropriate. The Site Erosion Control Plan shall include measures to ensure the following standards are fulfilled:

1. Sediment control practices must minimize sediment from entering surface waters, including curb and gutter systems and storm sewer inlets.

2. Temporary or permanent drainage ditches and sediment basins that are designed as part of a treatment system (e.g., ditches with rock check dams) require sediment control practices as appropriate for site conditions.

3. In order to maintain sheet flow and minimize rills and/or gullies, there shall be no unbroken slope length of greater than 75 feet for slopes with a grade of 3:1 or steeper.

4. To limit soil erosion, all exposed soil areas must be stabilized as soon as possible but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

5. Sediment control practices must be established on all down gradient perimeters before any upgradient land disturbing activities begin. These practices shall remain in place until final stabilization has been established.

6. The timing of the installation of sediment control practices may be adjusted to accommodate short-term activities such as clearing or grubbing, or passage of vehicles. Any short-term activity must be completed as quickly as possible and the sediment control practices must be installed immediately after the activity is completed. However, sediment control practices must be installed before the next precipitation event even if the activity is not complete.

7. All storm drain inlets must be protected by appropriate BMPs during construction until all sources with potential for discharging to the inlet have been stabilized.

8. Temporary soil stockpiles must have silt fence or other effective sediment controls, and shall not be placed in surface waters, including stormwater conveyances such as curb and gutter systems, conduits, or ditches.

9. Vehicle tracking of sediment from the construction site (or onto streets within the site) must be minimized by BMPs such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping must be used if such BMPs are not adequate to prevent sediment from being tracked onto the street.

D. Inspection and Maintenance:

1. The contractor shall designate a ESC Technician that shall:

   a. Be familiar with all aspects of a given site's ESC activities.

   b. Be responsible for all inspections, record keeping, communication, and/or coordination with the City, and implementation of required corrective actions.

   c. Be available to visit the site during working hours within four hours of notification by the Director of Public Works.

   d. Provide written documentation, with submittal of the Stormwater Pollution Prevention Permit application, of successful completion of ESC training as defined below, or other training/certification program approved by the Director of Public Works.

2. The ESC Technician must routinely inspect the entire construction site once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours.

3. All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained with the erosion and sediment control plan.

4. All erosion prevention and sediment control BMPs must be inspected to ensure integrity and effectiveness. All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours after discovery, or as soon as field conditions allow access.

5. The owner and operator are responsible for the operation and maintenance of temporary and permanent water quality management BMP/IMPs, as well as all erosion prevention and sediment control BMPs, for the duration of the construction work at the site.

6. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts.

9-5-8: STORMWATER MANAGEMENT PLAN STANDARDS AND APPROVAL:

A. Approval: No stormwater management plan which fails to meet the standards contained in this section shall be approved. All proposed projects required to submit a stormwater management plan, as per subsection 9-5-5(A) of this chapter, shall incorporate the erosion

and sediment control plan requirements set forth in sections 9-5-6 and 9-5-7 of this chapter into the stormwater management plan.

The City may prohibit or restrict the use of stormwater infiltration practices when soil conditions, groundwater supply issues, safety issues, snow removal, and other concerns would show such practices to be impractical or unsafe. All such exceptions must be approved by the Director of Public Works. Specific prohibitions and restrictions on infiltration practices are:

1. Infiltration systems are prohibited:

    a. Where industrial facilities are not authorized to infiltrate industrial stormwater under an NPDES/SDS Industrial Stormwater Permit issued by MPCA.

    b. Where vehicle fueling and maintenance occur.

    c. Where the bottom of the infiltration basin is less than 3 feet to bedrock or seasonally saturated soils.

    d. Where high levels of contaminants in soil or groundwater will be mobilized by infiltration.

    e. Within areas designated as Very High Vulnerability and High Vulnerability within a Drinking Water Supply Management Area (DWSMA).

2. The City restricts the use of infiltration systems in areas:

    a. Low permeability soils (i.e., Hydrologic Soil Group D soils) or where a confining layer exists below the proposed basin.

    b. Within 1,000 feet upgradient or 100 feet down gradient of active karst features.

    c. Within the areas designated as: Moderate Vulnerability; and Low to Very Low Vulnerability within a Drinking Water Supply Management Area (DWSMA).

    d. Where soil infiltration rates are more than 8.3 inches per hour.

3. For linear projects where the lack of right-of-way precludes the installation of volume control practices that require volume control in accordance with subsection 9-5-8(D)(1) of this chapter, the City may allow a lesser volume control on the construction site provided a reasonable attempt has been made to obtain right-of-way during the project planning process and:

    a. One or more of the prohibited or restricted site conditions listed above exists; and

b. The owner implements other practices (e.g., evapo-transpiration, reuse, conservation design, green roofs, etc.) on the site that may not fully meet the volume control requirements.

B. Compliance with Other Plans: All stormwater management plans must be prepared in accordance with the City Plans, City permits, TMDL allocation plans, and other special district plans as adopted and amended from time to time.

C. Stormwater Management Criteria for Permanent Facilities: The applicant shall install or construct, on or for the proposed land disturbing or development activity, all stormwater management facilities necessary to manage increased runoff in compliance with design standards set forth in the Inver Grove Heights Stormwater Manual – Northwest Area (2006) and all subsequent revisions and as directed by the Director of Public Works.

1. Stormwater BMPs and IMPs shall infiltrate 1.0 inch of runoff from new impervious surfaces for new developments. For redevelopment projects, stormwater BMPs and IMPs shall infiltrate 1.0 inch of runoff from new and redeveloped impervious.

2. Pollutant Removal Requirements:

   a. For projects that have met the infiltration/volume control requirements above, the pollutant removal requirements are considered to be met.

   b. For projects where infiltration is prohibited or restricted (see subsections 9-5-8(A)(3)(a) and 9-5-8(A)(3)(b) of this chapter), the following pollutant removal standards apply prior to site discharge reaching a downstream receiving water: achieve a minimum 85% removal of total suspended solids and minimum 55% removal of total phosphorus.

   c. For redevelopment projects, BMPs shall be such that there is a net reduction in phosphorus and total suspended solids loading from the redevelopment site when compared to the existing (currently developed) site.

   d. Where projects propose multiple BMPs in a treatment train approach to meet the pollutant removal requirements, at least 50% of the project area shall be treated in BMPs located in the upstream areas of the site.

3. Low Impact Development (LID), or Green Infrastructure, design concepts shall be incorporated into development projects located in the Northwest Area and in other landlocked basins in the City. In all other parts of the City, LID design concepts must be implemented where ever possible. Specific LID-related requirements for the Northwest Area and other land locked basin areas include:

a. Post development runoff volume must match predevelopment runoff volume for the 5-year 24-hour event.

b. Proposed developments must use infiltration raingardens, vegetated swales, parking lot bioretention, infiltration basins/trenches, disconnection of impervious surfaces, green roofs, and other LID techniques.

c. Mass grading should be avoided to reduce compaction of natural/open space areas.

d. Joint parking and shared driveway arrangements are encouraged.

e. Pervious materials may be used for parking lot surfaces and are encouraged for single-family residential driveways.

f. Parking lot curbing generally must be flat (ribbon curb) or have breaks at regular intervals (curb cuts) to convey runoff into the stormwater system.

g. Residential downspouts and sump pumps must discharge to cisterns and/or permeable surfaces. Non-residential downspouts and sump pumps must meet this requirement if reasonably possible.

h. Narrower street widths are allowed, with restrictions.

4. Applicants shall include methods for reducing the amount of impervious surface on their sites. Methods to use include:

   a. Reducing road widths, such as allowing parking on only one side of a residential street.

   b. Eliminating pavement in the center of cul-de-sacs.

   c. Reducing sidewalk widths.

   d. Allowing and providing for shared parking.

   e. Creating a smaller building footprint (e.g., building two-story houses instead of one-story houses).

   f. Installing semipermeable/permeable paving, where feasible.

5. Storm sewer conveyance systems will be designed to provide discharge capacity for the 10 year frequency runoff event. The City may allow variances to this standard in areas where a new storm sewer system would connect to an existing storm sewer system that does not have and is not expected in the future to have a 10 year capacity. The portions of the system that convey outflows from ponding areas will be sized to convey the critical

10 year storm flow or the required 100 year outflow from upstream ponding areas, whichever is greater. The storm sewer systems shall be designed for 10 year storm events and their performance shall be analyzed for storms exceeding the design storm.

6. Post-development peak discharge rates shall not exceed existing discharge rates for the 2-year, 5-year, 10-year, and 100-year (50 percent, 20 percent, 10 percent, and 1 percent probability) 24-hour duration storm events. Hydrologic modeling to calculate the flood levels resulting from the 2-year, 5-year, 10-year, and 100-year 24-hour duration storm events shall be submitted for review.

7. Atlas 14 precipitation and storm distribution data shall be used for all hydrologic/hydraulic analyses.

8. The City will require the incorporation of emergency overflow structures (e.g., swales, spillways), where feasible, into pond outlet structure designs to prevent undesired flooding resulting from storms larger than the 100-year (1 percent) event or plugged outlet conditions.

9. All ponds shall use multi-stage outlets where needed to control flows from smaller, less frequent storms and help maintain base flows in downstream open channels. Pipes entering wet ponds shall have the invert elevation set 0.5 feet below the pond normal water level.

10. For culvert outlet velocities less than or equal to 4 fps, check shear stress to determine if vegetation or riprap will be adequate. If vegetation is used, temporary erosion control during and immediately follow construction shall be used until vegetation becomes established. For velocities greater than 4 fps, energy dissipaters shall be designed in accordance with MnDOT Design Criteria.

11. The placement of skimming devices at the outlet of all on-site detention basins to capture trash and floatable debris is required.

12. For landlocked basin areas only the existing tributary area will be allowed to discharge to a landlocked basin, unless provisions have been made for an outlet from the basin. The water quality and flooding impacts of proposed outlets from landlocked basins on downstream water resources shall be evaluated.

13. The Lowest Floor Elevation (LFE) of any structure adjacent to an inundation area with an outlet shall be at least two (2) feet above the 100-year flood level. For the purposes of this section, structure means a walled and roofed building, including gas or liquid storage tanks, which are principally above ground. The term includes recreational vehicles and travel trailers on site for more than 180 days.

14. The Lowest Floor Elevation (LFE) of any structure (as described in Section 9-5-8 (C) (13))~~Item 13~~) adjacent to a landlocked basin or inundation area shall meet the following standards and as illustrated in Figure 1:

a. Scenario 1: Where the 100-year flood level is 0 to 6 feet below the natural overflow elevation (NOF) the LFE shall be the greater of the 100-year elevation plus 2 feet or the NOF plus 1 foot. The NOF must be maintained and an easement obtained over the NOF.

b. Scenario 2: Where the 100-year flood level is 6 to 18 feet below the NOF, the LFE shall be the 100-year elevation plus 6 feet. The overflow shall consist of a drop inlet having a minimum pipe diameter of 18 inches and an invert set 4 feet above the 100-year flood level.

c. Scenario 3: Where the 100-year flood level is more than 18 feet below the NOF, the LFE shall be the 100-year elevation plus 10 feet. The overflow shall include an easement corridor and contingency for a future gravity outlet or lift station outlet.

d. For all landlocked basins, the LFE shall be set at least 1 foot above the greater of the back-to-back 100-year storm event and a 100-year 10-day snow melt.

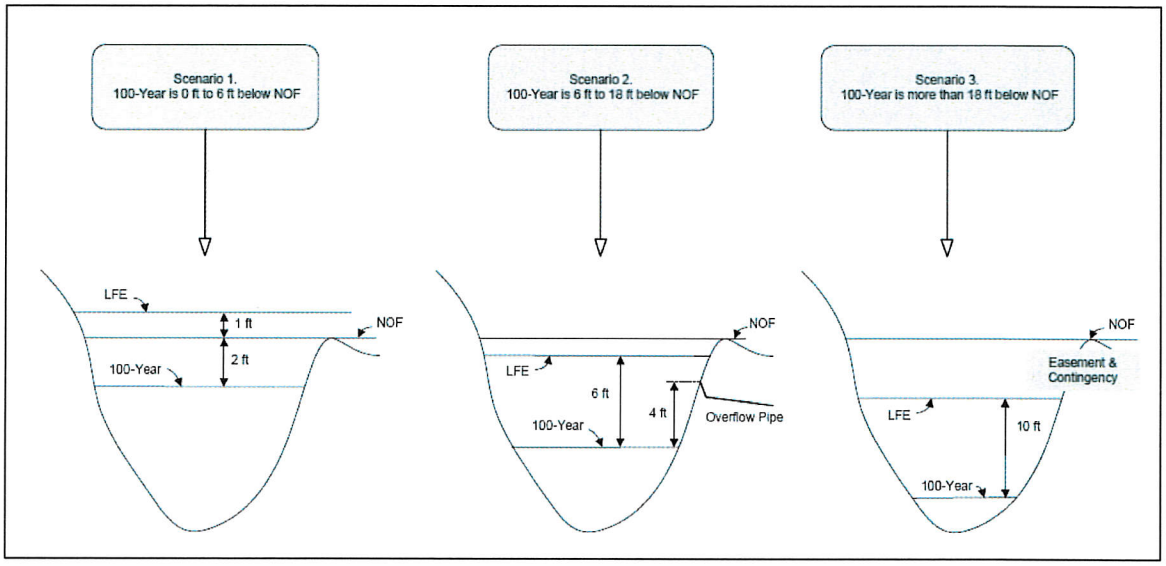

Figure 1: Lowest Floor Elevation Standards for Landlocked Basins

15. The City may allow non-building structures or fill with an inundation area, provided the structure or fill is placed in an area where the 100-year flood level is not more than 18 inches in depth in the location of the activity, and the activity does not result in any loss of flood storage volume or result in an increase in the regulatory flood elevation.

D. Mitigation For Permanent Facilities: If the applicant, in consultation with the Director of Public Works, believes that the requirements for volume control, TP and/or TSS cannot be

met on the site of the original construction activity, the applicant may request to pursue mitigation off-site and provide appropriate documentation to the city as support for a request to pursue mitigation. The proposed mitigation must meet the following criteria:

1. Mitigation project areas should be selected in the following order of preference and in consultation and with approval by the city:

    a. Locations that yield benefits to the same receiving water that receives runoff from the original construction activity.

    b. Locations within the same Department of Natural Resource (DNR) catchment area (or City subwatershed area shown in the WRMP) as the original construction activity.

    c. Locations in the next adjacent DNR catchment area (or City subwatershed area shown in the WRMP) up-stream.

    d. Priority locations within the city.

2. Mitigation projects must involve the creation of new structural stormwater BMPs, the retrofit of existing structural stormwater BMPs, or the use of a properly designed regional structural stormwater BMP.

3. Routine maintenance of structural stormwater BMPs required by this section cannot be used to meet mitigation requirements.

4. Mitigation projects must be completed within 24 months after the start of the original construction activity.

5. If the mitigation project is a private structural stormwater BMP and the city is not responsible for long-term maintenance of the project, the city will require written and recorded documentation of maintenance responsibilities.

E. Models/Methodologies/Computations: Hydrologic models and design methodologies used for determining runoff characteristics and analyzing stormwater management structures shall be as set forth in the Inver Grove Heights Stormwater Manual – Northwest Area (2006) and all subsequent revisions and as directed by the Director of Public Works.

F. Legal Documents: Legal documents for securing permanent easements as necessary shall be submitted for review. Easements extending up to at least the 100-year flood elevation over floodplains, detention areas, wetlands, ditches, and all other parts of the stormwater system shall be conveyed to the City.

9-5-9: STORMWATER AND URBAN RUNOFF POLLUTION CONTROL:

A. Good Housekeeping Provisions: Any owner or occupant of property within the City shall comply with the following good housekeeping requirements:

1. No person shall leave, deposit, discharge, dump, or otherwise expose any chemical or septic waste in an area where discharge to streets or storm drain systems may occur. This section shall apply to both actual and potential discharges.

2. Runoff of water from residential property shall be minimized to the maximum extent practicable. Runoff of water from the washing down of paved areas in commercial or industrial property is prohibited unless necessary for health or safety purposes and not in violation of any other provision of the City's Code.

3. Storage of Materials, Machinery, and Equipment:

   a. Objects, such as motor vehicle parts, containing grease, oil or other hazardous substances, and unsealed receptacles containing hazardous materials, shall not be stored in areas susceptible to runoff.

   b. Any machinery or equipment which is to be repaired or maintained in areas susceptible to runoff shall be placed in a confined area to contain leaks, spills, or discharges.

B. Removal of Debris and Residue: All motor vehicle parking lots located in areas susceptible to runoff shall be kept clean of debris and residues. Such debris shall be collected and disposed of properly. Fuel and chemical residue or other types of potentially harmful material, such as animal waste, garbage or batteries, which are located in an area susceptible to runoff, shall be removed as soon as possible and disposed of properly. Household hazardous waste may be disposed of through the County collection program or at any other appropriate disposal site and shall not be placed in a trash container.

9-5-10: MAINTENANCE OF PERMANENT STORMWATER FACILITIES:

A. Maintenance of stormwater pollution prevention BMPs shall meet the following minimum standards:

   1. All stormwater pollution prevention BMPs shall be designed to minimize the need for maintenance, to provide access for maintenance purposes, and to be structurally sound.

   2. All stormwater pollution prevention BMPs shall have a plan of operation and maintenance that assures continued effective functionality as designed.

   3. Upon completion of all construction on a given site, stormwater pollution prevention BMPs shall be maintained as necessary to return the BMP to its original design function and capacity.

B. Assignment of responsibility for maintenance of facilities, associated costs, and necessary easements are detailed in the stormwater facilities maintenance agreement or improvement agreement for the project.

C. If site features/BMPs that are implemented to comply with the permanent stormwater requirements change such that a reduction in the intended design function and capacity is determined by the City, the owner will be required to maintain the BMP to restore the intended design function and capacity of the BMP, modify the BMP or create a new BMP(s) to ensure that the features/BMPs on site meet the intended design function and capacity.

9-5-11: PENALTY, ENFORCEMENT, RIGHT OF ENTRY:

A. Any person, firm or corporation violating any provision of this chapter shall be fined as provided in section 1-4-1 of this code, and a separate offense shall be deemed committed on each day during or on which a violation occurs or continues. (1974 Code 430.21; amd. 2008 Code)

B. The Director of Public Works may inspect construction sites for compliance with provisions of this ordinance.

C. Notification of Failure of the Erosion and Sediment Control Plan or Stormwater Management Plan.

1. Notification by City: If upon notification by the City of an observed failure of the erosion and sediment control plan or stormwater management plan measures, the contractor fails to correct the failure within Forty-eight (48) hours after notification by the City or the time specified by the City, the City, at its discretion, may begin corrective work.

2. Erosion Off-Site: If erosion breaches the perimeter of the site, the applicant shall immediately develop a cleanup and restoration plan, obtain the right-of-entry from the adjoining property owner, and implement the cleanup and restoration plan within forty-eight (48) hours of obtaining the adjoining property owner's permission. In no case, unless written approval is received from the City, may more than seven (7) calendar days go by without corrective action being taken. If in the opinion of the City, the permit holder does not repair the damage caused by the erosion, the City may do the remedial work required.

3. Erosion/Sediment Deposition into Streets, Wetlands, or Water Bodies: The applicant shall immediately cleanup and repair any eroded soils (including tracked soils from construction activities) or sediment that has entered, or appears likely to enter, streets, wetlands, or other water bodies. The applicant shall provide all traffic control and flagging required to protect the traveling public during the cleanup and repair operations.

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

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

b. Revoke any permit issued by the City to the applicant for the site in question or any other of the applicant's sites within the City's jurisdiction.

c. Direct the correction of the deficiency by City staff or by a separate contract. The issuance of a permit constitutes a right-of-entry for the City or its contractor to enter upon the construction site for the purpose of correcting deficiencies in the erosion and sediment controls and stormwater management facilities.

d. All costs incurred by the City in correcting erosion and sediment controls and stormwater management deficiencies shall be reimbursed by the applicant. If payment is not made within thirty (30) days after costs are incurred by the City, payment will be made from the applicant's financial securities, as set by other City permits/approvals.

e. If there is an insufficient financial amount in the applicant's financial securities to cover the costs incurred by the City, then the City may assess the remaining amount against the property.

D. Notification of Need for Maintenance, Repair, or Replacement of Existing Private Stormwater Facilities of a Non-Critical Nature:

If, upon inspection, the City finds that any private stormwater management facilities require maintenance, repair, or replacement, but such deficiencies do not create a critical or imminent threat to adjacent properties, the environment, or other stormwater facilities; the party or parties responsible for the continued operation of the facilities shall be given written notice of the findings, the actions required to correct the situation, and a timetable by which such activities must be completed. Such parties shall have 15 days to reply to the City indicating their response to the notice.

If the responsible party or parties do not complete the necessary activities stipulated by the City Public Works Department, the City, after notice, may order that such activities be completed by the City or its designated contractor and that all costs associated with such activities be certified by the Director of Public Works to the Council. The amount so charged shall be a lien upon the properties benefiting from and utilizing the stormwater facilities maintained, repaired or replaced and shall be added to, become, and form part of the taxes next to be assessed and levied upon such properties. The Council shall, by appropriate resolution, assess the above-mentioned costs against said properties, and certify the same to the County. The same shall be collected and enforced in the same manner as the collection of real estate taxes.

E. Operator Responsibility: The contractor is jointly responsible with the owner for compliance with all portions of the permit and stormwater management plan prior to final completion of construction activities.

9-5-12: CONFLICTING PROVISIONS:

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

To the extent this Chapter imposes standards that are inconsistent with other City codes or requirements, code or standard that imposes the more restrict requirements shall prevail.

Section Two. Effective Date. This Ordinance shall be effective from and after its passage and publication according to law.

Passed in regular session of the City Council on the ___ day of _____, 2016.

CITY OF INVER GROVE HEIGHTS

By: _____
George Tourville, Mayor

ATTEST:

By: _____
Michelle Tesser, Deputy City Clerk