CHAPTER 21

STORMWATER MANAGEMENT

21.01 PURPOSE

(1) AUTHORITY

(a) This chapter is adopted by the Town of River Falls (hereinafter referred to as the Town) under the authority granted by Wis. Stats. §62.234 and §62.11(5). This chapter supersedes all conflicting and contradictory storm water management regulations previously enacted under Wis. Stats. §62.23 except as specifically provided in Wis. Stat. §62.234. Wis. Stat. §62.23 applies to this chapter and any amendments

(b) The provisions of this chapter are deemed not to limit any other lawful regulatory powers of the Town.

(c) In instances where the provisions of this chapter conflict with provisions of other Town ordinances, zoning regulations, or the provisions of State agencies including, but not limited to, the Wisconsin Pollutant Discharge Elimination System (WPDES) Storm Water Permits issued by the Department of Natural Resources under Wis. Stat. §281.31, the more stringent provisions shall apply.

(d) The Town hereby designates the Town Engineer as the person responsible to administer and enforce the provisions of this chapter.

(e) The requirements of this chapter do not preempt more stringent storm water management requirements that may be imposed by WPDES Storm Water Permits issued by the Department of Natural Resources under Wis. Stat. §283.31.

(2) FINDINGS OF FACT.

(a) The Town and adjacent towns are growing at a rapid rate. The Kinnickinnic River and its tributaries are valuable trout waters of regional significance, representing a major natural amenity of the community. However, the effect of storm water from the Town and the City has the potential to degrade the physical and biological characteristics of the Kinnickinnic River and its' tributaries. The increase in urban and rural runoff, and the associated thermal and sediment related pollution from present and future land uses will continue to have a detrimental effect on the cold-water fishery of the Kinnickinnic River and its' major tributaries without proper management of surface and ground water.

(b) The protection of the water quality of the Kinnickinnic is critical to the environmental and economic future of the community. Development in the Kinnickinnic River Watershed needs to be carefully planned to protect the existing resources. Trout are considered an indicator species of environmental quality. Therefore, trout habitat is a major issue in this urbanizing area. A

strategy to protect and enhance this resource must be developed, locally supported, adopted and implemented.

(c) With an increase in development pressure, there is less opportunity for groundwater to infiltrate and recharge groundwater and cold-water feeder streams. Uncontrolled storm water runoff will result in increased water temperatures that threaten high quality trout waters. In addition, uncontrolled rates and volumes of storm water runoff can:

1. Degrade physical stream habitat by increasing stream bank erosion, increasing stream bed scour, diminishing groundwater recharge, diminishing stream base flows and increasing water temperatures;

2. Diminish the capacity of lakes and streams to support fish, aquatic life, recreational and water supply uses by increasing loadings of nutrients and other urban pollutants;

3. Alter wetland communities by changing wetland hydrology and by increasing pollutant loads;

4. Reduce the quality of groundwater by increasing pollutant loading;

5. Threaten public health, safety, property and general welfare by overtaxing storm sewers, drainage ways and other minor drainage facilities;

6. Threaten public health, safety, property and general welfare by increasing major flood peaks and volumes;

7. Undermine floodplain management efforts by increasing the incidence and levels of flooding.

(d) The Town was included in the Kinnickinnic Priority Watershed established by St. Croix and Pierce County with the Department of Natural Resources (DNR) to address watershed management at the basin level. The Priority Watershed Plan, Non-Point Source Control Plan for the Kinnickinnic River Priority Watershed Project, was adopted by St. Croix and Pierce Counties in March 1999, and approved by the DNR on April 13, 1999.

(3) PURPOSE.

(a) The general purpose of this chapter is to accommodate anticipated community development and land use practices, while controlling the quality and quantity of storm water runoff and properly managing and protecting ground water resources as well as the physical habitat of Kinnickinnic River and its tributaries, and set forth storm water management and erosion control performance standards which apply to all land development and land disturbing activities.

(b) Specific purposes are to:

1. The maximum extent practical, mimic existing hydrology including the existing base flow, infiltration, storm flow and thermal regime of the Kinnickinnic River and its tributaries;

2. Prevent and control the adverse effects of storm water, prevent and control soil erosion, prevent and control water pollution, protect spawning grounds, fish and aquatic life;

3. Control the exceeding of the safe capacity of existing drainage facilities and receiving water bodies; prevent undue channel erosion; control increases in the scouring and transportation of particulate matter; prevent conditions that endanger downstream property;

4. Further the maintenance of safe and healthful conditions; and

5. Control building sites, placement of structures, and extent of impervious surface and promote sound economic growth.

21.02 APPLICABILITY AND JURISDICTION.

(1) APPLICABILITY. This chapter applies to the following sites of land development or land disturbing activities:

(a) Those requiring a subdivision plat approval or the construction of houses or commercial, industrial or institutional buildings on lots of approved subdivision plats;

(b) Those requiring a certified survey approval or the construction of houses or commercial, industrial or institutional buildings on lots of approved certified surveys;

(c) Those involving grading, removal of protective ground cover or vegetation, excavation, land filling or other land disturbing activity affecting a surface area of 10,000 sq. ft. or more;

(d) Those involving excavation or filling or a combination of excavation or filling affecting 400 cu. yd. or more of dirt, sand or other excavation or fill material;

(e) Those involving street, highway, road, or bridge construction, enlargement, relocation or reconstruction;

(f) Those involving the laying, repairing, replacing or enlarging of an underground pipe or facility for a distance of 300 ft. or more for commercial or industrial use.

(g) Those involving construction of any paved surface exceeding 10,000 square feet.

(NOTE: The preceding applicability criteria were prepared by the State Legislature and are specifically stated in §144,266, Wis. Stats., for inclusion in the model ordinance. Utility companies responsible for emergency repair work should enter into a "memorandum of agreement" with the Town Board clearly stating their responsibilities if their activities may be included under any of the above applicability criteria.)

(h) The construction of individual homes and farm buildings under 10,000 square feet are excluded from this ordinance unless said siting is located on slopes greater than 20% or is located within the flood fringe area as designated on the Pierce County Flood Fringe map.

(2) JURISDICTION. This chapter applies to all land development or land disturbing activities within the boundaries of the Town. No land owner or land operator may undertake a land development or land disturbing activity subject to this ordinance without having met the performance standards set forth in the Water Management Plan and without having received a permit from the Town Engineer prior to commencing the proposed activity.

(3) EXCEPTIONS. The following exceptions apply to the provisions of this chapter:

(a) Any new single family residence that has a DNR permit under NR 216.

(b) If the conditions in subparagraph (1), (2), or (3) are met, owners, builders and developers of single family and duplex homes shall be exempt from the provisions of this chapter with the exception that all provisions related to construction site erosion control shall be met within a subdivision.

1. For initial construction on a lot one acre or less in area and that was part of an approved plat or CSM prior to July 18, 2005.

2. For initial construction on a lot that is part of a Preliminary Plat or CSM approved after July 18, 2005, the following conditions are met:

    a. The sub-divider of the lot has obtained a permit in accordance with this chapter.

    b. The lot is developed in accordance with the permit that was issued to the sub-divider.

3. For subsequent changes to a currently developed lot, the following conditions are met.

    a. Activity is disturbing less than 2000 square feet of land; and

b. Activity involves the addition of less than 1000 square feet impervious surface.

(c) If the conditions in subparagraph (1) are met, owners, builders and developers of other than single family and duplex homes shall be exempt from the provisions of this chapter with the exception that all provisions related to construction site erosion control shall be met.

1. For initial construction on a lot that was part of an approved Preliminary Plat or CSM prior to July 18, 2005 the following conditions are met:

a. The sub-divider of the lot has provided storm water management facilities in accordance with a storm water management plan previously approved by the Town.

b. The lot is developed in accordance with that previously approved storm water management plan.

(d) The Town Engineer may establish on-site storm water management requirements less stringent than those set forth herein provided provisions are made to manage storm water by an off-site facility and provided all of the following conditions for the off-site facility are met:

1. The off-site facility is operational prior to commencing the proposed land development or land disturbing activity.

2. The off-site facility is designed and adequately sized to provide a level of storm water control equal to or greater than that which would be afforded by on-site practices meeting the requirements of this chapter.

3. The off-site facility has a legally obligated entity responsible for its long-term operation and maintenance.

(4) EXCLUSIONS. The following are excluded from the provisions of this chapter:

(a) This chapter is not applicable to activities conducted by a state agency, as defined under Wis. Stat. §227. 01 (1), but also including the office of district attorney, which is subject to the state plan promulgated or a memorandum of understanding entered into under Wis. Stat. §281. 33 (2).

21.03 DEFINITIONS.

(a) For the purpose of this chapter, the following definitions shall apply:

1. AGRICULTURAL ACTIVITY means the planting, growing, cultivating and harvesting of crops; growing and tending of gardens and trees; harvesting of trees.

2. AGRICULTURAL LAND USES. Alterations or disturbances of land for the production of food and fiber including, but not limited to, general farming, livestock and poultry enterprises, grazing, nurseries, horticulture, viticulture, truck farming, forestry, sod production, cranberry production and wild crop harvesting and including on site structures necessary to carry out such activities.

3. BASE FLOW means normal flow conditions for a stream or river.

4. BEST MANAGEMENT PRACTICES (OR BMP'S) means practices, techniques or measures that are effective in reducing flooding, removing pollutants, providing thermal mitigation, enhancing infiltration and/or providing other benefits related to stormwater management set forth in the Wisconsin Department of Natural Resources Conservation Practice Standards, or if no standard exists for a specific topic, then the Wisconsin Construction Site Best Management Practice Handbook, WDNR Pub. 24 WR- 222 November 1993 Revision., and any subsequent revisions thereto.

5. BUSINESS DAY means a day that both the offices of the Town of River Falls and the permit holder are routinely and customarily open for business.

6. CEASE AND DESIST ORDER means a court issued order to halt land development or land disturbing activity that is being conducted in violation of the ordinance.

7. DETENTION means the temporary detaining or storage of storm water in reservoirs, on rooftops, in streets, parking lots or other areas under predetermined and controlled conditions, with the rate of discharge therefore regulated by appropriately installed devices.

8. EROSION OR SOIL EROSION means the detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

9. EXCAVATION means any act by which organic matter, earth, sand, gravel, rock, or any other similar material is cut into, dug, quarried, uncovered, removed, displaced, relocated or bulldozed, and shall include the conditions resulting from the activity.

10. FILL means any act, by which earth, sand, gravel, rock or any other material is deposited, placed, replaced, pushed, dumped, pulled,

transported or moved by man to a new location and shall include the conditions resulting therefrom.

11. FINANCIAL GUARANTEE means a performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the Town of River Falls by the permit holder to assure that requirements of the ordinance chapter are carried out in compliance with the permit.

12. GRADING means altering the elevation of the land surface by stripping, excavating, filling, stockpiling of soil materials or any combination thereof and shall include the land from which the material was taken or upon which it was placed.

13. IMPERVIOUS SURFACE means a surface that releases the rainfall as surface runoff during a large portion of the design rainfall event. Rooftops, sidewalks, parking lots, and street surfaces are examples of impervious surfaces.

14. INFILTRATION means the process by which rainfall or surface runoff percolates or penetrates into the underlying soil.

15. KARST FEATURE means an area or geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, or seeps.

16. LAND DEVELOPMENT ACTIVITY means any construction of buildings, roads, parking lots, paved and unpaved storage areas and similar facilities, but not including agricultural activity.

17. LAND DISTURBING ACTIVITY means any man-made land change to the surface of private or public lands which may result in soil erosion, sedimentation or the increase in runoff, including but not limited to tilling, removal of vegetative cover, stockpiling of soil, grading, excavating and filling of land, except that the term shall not include such minor land disturbing activities as home gardens and normal repair and maintenance of private roads. This term does not include agricultural land uses.

18. LAND OCCUPIER means any person who holds title to land either as sole owner, a tenant in common or a joint tenant or has title as a trustee, assignee, or has a land contract vendor's interest.

19. LAND COVER means the various cover types found on a specific parcel including impervious surface, green space, wooded area, parking lot, etc.

20. MAINTENANCE AND MONITORING AGREEMENT means a legal document filed with the County Register of Deeds as a property deed restriction, which provides for long-term maintenance of storm water management practices.

21. NRCS OR NATURAL RESOURCES CONSERVATION SERVICE means the United States Agency responsible for establishing standards for and design of many water quality structures and practices. The NRCS was formerly the Soil Conservation Service or SCS.

22. NOAA ATLAS 14 means the rainfall frequency estimates for a specific geographic locations which supercedes rainfall frequency estimates contained in Type-II Distribution. All stormwater modeling shall be based on these rainfall events.

23. OFF-SITE means located outside the property boundary described in the permit application for land development activity or land disturbing activity.

24. ON-SITE means located within the property boundary described in the permit application for land development activity or land disturbing activity.

25. P8 - URBAN CATCHMENT MODEL means a program for predicting polluting particle assage thru pits, puddles, & ponds; prepared for IEP, Inc.. & Narragansett Bay Project USEPA/RIDEM by William W. Walker, Jr.

26. PARCEL means all contiguous lands under the ownership or control of a landowner, land occupier or land user.

27. PEAK RUNOFF RATE means the maximum rate at which storm water is discharged from a site as expressed in cubic feet per second.

28. PERMIT means a written authorization made to an applicant to conduct land development or land disturbing activities.

29. PERMITTEE means any person to whom a permit is issued.

30. PERMIT ADMINISTRATION FEE means a sum of money paid by the permit applicant for the purpose of recouping the expenses incurred by the Town in administering the permit.

31. PERSON means any individual, corporation, partnership, joint venture, agency, unincorporated association, municipal corporation, county or state

agency within Wisconsin, the Federal government or any combination thereof.

32. PLAN COMMISSION means the body established under §62.23 (1), Wis. Stats.

33. PRIORITY WATERSHED means the Kinnickinnic Priority Watershed of Pierce and St. Croix Counties.

34. PUBLIC LANDS means all publicly owned lands which are subject to regulation by the Town including, but not limited to:

    a. All lands owned by the Town of River Falls.

    b. All lands which are owned by another unit of government if that unit of government or the development project is legally subject to erosion and storm water runoff control by the Town under this chapter or by reference under other ordinances.

35. REGIONAL POND means a storm water pond intended to serve multiple parcels and or developments.

36. REMOVAL means cutting vegetation to the ground or stumps, complete extraction or killing by spraying.

37. RETENTION means the permanent storage of storm water without surface discharge.

38. RUNOFF means the same as the definition for "storm water runoff.

39. SAFE CAPACITY means the rate of flow that can be handled by the receiving waterway without causing flooding or erosion damage.

40. SEDIMENT means solid material, both mineral and organic, that has been deposited by water, is in suspension in water, is being transported, has been removed from its site of origin by the processes of soil erosion or is discharged into surface waters from other sources.

41. SEDIMENTATION means settling or deposition of sediment.

42. SENSITIVE RESOURCES means natural resources that are sensitive to the impacts of urbanization, specifically including ground water, cold-water springs, wetlands with diverse functions and values and other unique resources.

43. SITE RESTRICTION means any physical characteristic which limits the use of storm water best management practice as prescribed in the

Wisconsin Storm Water Manual published by the Wisconsin Department of Natural Resources.

44. STOP WORK ORDER means a method of giving notice to the permittee that one or more provisions of this chapter have been violated.. Notice is given both by posting upon the lands where the disturbing activity occurs one or more copies of a poster stating the violation and by mailing a copy of this poster by certified mail to the permittee at the address shown on the permit.

45. STORM SEWER means a closed conduit for conducting collected storm water.

46. STORM WATER DRAINAGE SYSTEM OR DRAINAGE SYSTEM means all facilities used for conducting runoff to, through or from a drainage area to the point of final outlet including, but not limited to, any of the following: conduits and appurtenant features, canals, channels, ditches, streams, culverts, reservoirs, detention basins, storm sewers, streets and pumping stations.

47. STORM WATER PLAN means a document that identifies what actions will be taken to reduce storm water quantity, volume, pollutant loads, thermal increases to the receiving stream and/or erosion resulting from land development activity to levels meeting the purpose and intent of this ordinance and the Water Management Plan.

48. STORM WATER RUNOFF means that portion of the precipitation falling during a rainfall event, or that portion of snowmelt, that runs off the surface of the land and into the natural or artificial conveyance or drainage network.

49. TOWN means the Town of River Falls and its representatives.

50. TOWN ENGINEER means the person or firm designated by the Town Board to administer this chapter and includes any other person designated by the Town Engineer or the Board in the absence of the Town Engineer.

51. TR-55 means the United States Department of Agriculture, Natural Resources Conservation Service (previously Soil Conservation Service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986, updated May 2013.

52. WATERS OF THE STATE mean all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within the state or its jurisdiction.

53. WETLANDS means an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophilic vegetation and which has soils indicative of wet conditions. These wetlands include natural, mitigation and restored wetlands.

54. WPDES STORM WATER PERMIT means a permit issued by the Wisconsin Department of Natural Resources under Wis. Stat. §283.31 that authorizes the point source discharge of storm water to waters of the state.

55. WATER MANAGEMENT PLAN means the City of River Falls Water Management Plan for the Kinnickinnic River and its Tributaries (April 20, 1995).

21.04 TECHNICAL STANDARDS

(1) DESIGN CRITERIA, STANDARDS AND SPECIFICATIONS. All BMPs required to comply with this chapter shall meet the design criteria, standards and specifications based on the following. If technical standards contained in the following documents conflict, the governing document shall be determined based on the order presented. Those technical standards with the highest priority shall prevail. In determining priorities, Section 4.1.a. shall be deemed to have top priority followed by Section 4.1.b, then Section 4.1.c, with Section 4.1.d. having the lowest priority.

(a) Applicable design criteria, standards and specifications identified in the Town of River Falls Storm Water Management Standards dated July 18,2005 and on file in the Town Engineer's Office or the Office of the Town Clerk.

(b) Applicable design criteria, standards, and specifications identified in the Wisconsin Department of Natural Resources Site Erosion and Sediment Control Technical Standards and the Post Construction Storm Water Management Technical Standards.

(c) Applicable design criteria, standards and specifications identified in the Wisconsin Construction Site Best Management Practice Handbook, WDNR Pub. WR-222 November 1993 Revision, and as subsequently revised.

(d) Applicable design criteria, standards and specifications identified in the Wisconsin Storm Water Manual, WDNR Pub. WR-349-94, 1994, including Technical Design Guidelines for Storm Water Management Practices, UW-Extension Pub. G3691, 2000.

(e) Other design guidance and technical standards identified or developed by the Wisconsin Department of Natural Resources under subchapter V of chapter NR 151, Wis. Adm. Code.

(2) OTHER STANDARDS. Other technical standards not identified or developed in sub. (1), but equivalent thereto, may be used provided that the methods have been approved by the Town Engineer.

21.05 PERMITTING REQUIREMENTS, PROCEDURES AND FEES

(1) PERMIT APPLICATION AND FEE. Unless specifically excluded by this chapter, any land owner or operator required to obtain a permit under this chapter shall submit to the Town Engineer a permit application made on a form provided by the Town for that purpose.

(a) Unless specifically excluded by this chapter, the following items must accompany a permit application before the permit application will be reviewed by the Town Engineer:

1. A storm water plan

2. A maintenance agreement

3. A non-refundable permit administration fee

(b) The fees referred to in this chapter shall be as established by the Town Board from time to time by resolution. A schedule of the fees shall be available for review in the office of the Town Clerk.

(c) The applicant for any permit shall pay a fee to the Town Clerk equal to the actual costs to the Town for the professional fees and disbursements incurred by the Town by reason of the review of the application and proposed use and improvements by any professional employees and consultants, including without limitation by way of enumeration, the planner, engineer, surveyor, attorney and any other professional employees or consultants hired by the Town with respect to consideration thereof. This shall include, without limitation by way of enumeration, the following:

1. Review of such application and proposed use and improvements and the plans therefore.

2. Inspection of the site and the improvements as and after such improvements are constructed.

3. Tests and other evaluations deemed necessary by such professional employees and consultants for their review and inspection.

4. Drafting and other preparation of any written opinions, advice and suggestions with respect thereto.

5. Drafting and preparation of any ordinances, resolutions, contracts, agreements and other documents with respect thereto.

6. Attendance at public meetings or hearings and telephone and actual conferences.

7. Any other professional services and disbursements charged to the Town which were necessitated by the submission and review of such application and proposed use and improvements, and construction of improvements and erosion and sediment control measures therein.

(d) At or prior to submission of any application for a permit that involves new construction or an addition to an existing building or other structure, the applicant or the applicant's representative shall deposit in escrow with the Town Clerk the amount specified. Such specified fees will be set by the Town Board from time to time. If the sum determined herein is inadequate or excessive for anticipated expenses, the Town Board my increase or decrease the required deposit at any time. Additionally, the Town may waive all or part of the required escrow deposit to the extent that a determination on the application will probably not include any of the employees, experts or tests necessary to make a determination on the application. Should the Town board thereafter determine that a greater escrow deposit is required up to the amount required under this section, the applicant must pay the additional amount to the Town Clerk within the time specified. Notice of the meeting for consideration of the application shall be mailed to the applicant or applicant's agent at least 5 days prior thereto. Upon final action on the application, approval of all improvements and erosion and sediment control measures required therein and a payment of all professional expenses incurred by the Town, any balance in escrow shall be returned to the applicant. This shall not prohibit the Town collecting any additional professional expenses subsequently charged to the Town. The Town Board may agree in writing with the owner of any premises generally leased to tenants to require less than the foregoing escrow deposit from an existing or prospective tenant if such owner in writing personally guarantees and provides satisfactory surety for payment of any sums then or thereafter due to the Town which could have been collected from a higher escrow deposit by such tenant.

(2) STORM WATER PLAN REQUIREMENTS. The storm water plan shall contain any information the Town Engineer may need to evaluate the environmental characteristics of the area affected by land development or land disturbing activity, the pre- and post-development hydrology, the potential impacts of the proposed activity upon the quality (including thermal) and quantity of storm water discharges, the potential impacts upon water resources and drainage utilities, and the effectiveness and acceptability of proposed storm water management measures in meeting the technical and performance standards and other requirements of this chapter. All site investigations, plans, designs, computations,

and drawings shall be certified by a licensed professional engineer to be prepared in accordance with accepted engineering practice and requirements of this chapter.

(3) CONTENTS OF THE STORM WATER PLAN. The storm water plan shall contain, at a minimum, the information required by the submittal checklist set forth in the Storm Water Management Standards. In addition, the following requirements apply as they further define the submittal requirements of the storm water plan:

(a) A map or maps of existing site conditions at a scale not smaller than 1 inch equals 100 feet showing:

1. Property lines and easements.

2. Existing structures, roads, other paving or impervious cover, and vegetative cover.

3. Location of predominant soil types.

4. Existing topography of the site and sufficient adjacent lands to indicate site, location and existing drainage patterns, water courses, drainage pipes or structures that may affect or be affected by the proposed land development or land disturbing activity. This information shall be presented on a topographic map having a contour interval not to exceed 2 feet.

5. Limits of any natural wetland and/or the floodplain based on a 100-year flood.

(b) A map or maps of final site conditions after completion of the land development or land disturbing activity at a scale not smaller than 1 inch equals 100 feet showing:

1. Erosion and Sediment Control.

a. Location and dimensions of all proposed land development and land disturbing activities, including excavation and fill areas, areas where existing soil and/or vegetative cover is to be disturbed or removed and areas where existing soil and/or vegetative cover is to be left undisturbed.

b. Location and dimensions of all temporary stockpile areas for excavated or fill materials or topsoil.

c. Areas to be sodded or seeded and mulched or otherwise stabilized with vegetation or other permeable/protective cover, describing type of final vegetative cover. Type and quantity of mulch or cover material and method of anchoring shall be indicated, as well as seeding mixtures and rates and lime and fertilizer application rates.

d. Location of all proposed best management practices, including but not limited to silt fence, construction site entrances, temporary sediment traps, bale checks, rip-rap, special restoration and/or shading elements, infiltration basins, detention ponds, and retention ponds.

e. Description of interim and permanent stabilization practices, including a practice implementation schedule. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized.

f. Stabilization of drainage ways.

g. Description of structural practices to divert flow away from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from the site.

h. Control of soil erosion from dirt stockpiles.

i. Installation of permanent stabilization practices as soon as possible after final grading.

j. Minimization of dust to the maximum extent practicable.

k. Placement of velocity dissipation devices at discharge locations and along the length of any outfall channel, as necessary, to provide a non-erosive flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.

2. Post-Construction Storm Water Management

a. Flow path and direction for all storm water conveyance sections;

b. Post- construction drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site;

c. Watershed boundaries used in hydrology and pollutant loading calculations and any changes to lakes, streams, wetlands, channels,

ditches, and other watercourses on and immediately adjacent to the site.

d. Estimated peak runoff rate(s) and normal 100-year water levels at each point of discharge of surface runoff from the site, including applicable assumptions and computations, consistent with the Performance Standards set forth in Section 7.

e. Location, dimensions and description (including capacity) of all channels, pipes, structures, basins or reservoirs or other conveyances proposed to carry runoff to the nearest adequate outlet, including applicable design assumptions and computations. The applicable design discharge rate, in cubic feet per second, for each structure, pipe, channel or conveyance and design flow velocity for all channels and outlets shall be indicated.

f. Management of overland flow at all sites, unless otherwise controlled by outfall controls.

3. Post-construction topography

a. Post-construction pervious areas including vegetative cover type and condition.

b. Locations of maintenance easements specified in the maintenance agreement.

c. Final proposed topography of the site at a contour interval not to exceed 2 feet.

d. Limits of any natural wetland and/or the floodplain based on a 100-year flood.

e. Finished grade of excavation and fill slopes.

f. Location, elevations and dimensions of proposed structures and paved areas, and location and types of utilities to be installed.

g. Completed forms for erosion control, hydrology, hydraulics, water quality, wetlands, thermal management, and pond maintenance per the Storm Water Management Performance Standards.

h. Hydrology and pollutant loading computations as needed to show compliance with performance standards. All major assumptions used in developing input parameters shall be clearly stated. The geographic areas used in making the calculations shall be clearly cross-referenced to the required map(s).

i. Explanation of the provisions to preserve and use natural topography and land cover features to minimize changes in peak flow runoff rates and volumes to surface waters and wetlands.

j. Explanation of any restrictions on storm water management measures in the development area imposed by wellhead protection plans and ordinances.

4. A description and schedule of planned land disturbing activities and corrective measures, including:

a. The name, address and telephone number of the land occupier and of the party responsible for maintaining erosion and runoff control structures.

b. A schedule indicating anticipated starting and completion dates of each sequence of land disturbing activities and the anticipated date of completion of erosion and runoff control measures and establishment of final cover for each sequence or area.

c. Provisions for monitoring and short/long term maintenance of erosion and runoff control measures and facilities, including easements.

d. Methods to prevent tracking of soil off the site and cleanup of adjacent streets and roads.

(4) REVIEW AND APPROVAL OF PERMIT APPLICATION. The Town Engineer shall review any permit application that is submitted with a storm water plan, maintenance agreement and the required fee. The following approval procedure shall be used:

(a) Accept all pre-application requests, and all permit applications that are accompanied by the storm water plan and the required fee.

(b) Review all plans and permit applications received when accompanied with the necessary information and the required fee in accordance with the following:

1. Within 30 business days of the receipt of a complete permit application, including all items as required by the submittal checklist, the Town Engineer shall inform the applicant in writing whether the application, storm water plan, erosion checklist and maintenance and monitoring agreement are approved or disapproved. The Town Engineer shall base the decision on requirements set forth in this chapter including, the technical standards set forth herein.

2. Failure by the Town Engineer to inform the permit applicant of a decision within 30 business days of a required submittal shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued. If the applicant proceeds under this approval process, the applicant shall comply with the permit requirements in Section 4, Parts 5 and 6, as if a permit had been issued.

3. Notify permit applicant in writing if additional information is required for review of the storm water plan.. If the required additional information is submitted, the Town Engineer shall have 15 business days from the date the information is received to inform the applicant that the storm water plan and maintenance and monitoring agreement are either approved or disapproved.

4. Issue the permits required in accordance with the procedure as set out in this chapter, but only when the erosion, sedimentation and runoff will be controlled to meet the performance standards set forth herein. If the storm water permit application, storm water plan, and maintenance and monitoring agreement are approved, the Town Engineer shall issue a permit.

5. If the proposed storm water plan is disapproved, inform the applicant in writing the reasons for disapproval.

6. Keep an accurate record of all plan data accepted, plans approved, permits issued, inspections made and other official acts.

(5) PERMIT CONDITIONS. All permits issued under this chapter shall be subject to the following conditions, and holders of permits issued under this chapter, and permit applicants proceeding as if a permit had been issued under the approval process provided in this chapter, shall be deemed to have accepted these conditions. The Town Engineer may suspend or revoke a permit condition, following written notification of the permittee. An action by the Town Engineer to suspend or revoke this permit may be appealed in accordance with the provisions of this section.

(a) Compliance with this permit does not relieve the permit holder of the responsibility to comply with all other applicable Federal, State, and local laws and regulations.

(b) The permit holder shall design, install and implement all structural and non-structural storm water management practices in accordance with the approved storm water plan, Technical Standards set forth in Section 21.04 of the General Code, and the Performance Standards set forth in Section 21.07 of the General Code and this permit, prior to commencing any land development or land disturbing activity.

(c) The permit holder shall notify the Town Engineer at least 5 business days before commencing any work in conjunction with the storm water plan and within 5 business days after completion of the storm water practices. If required as a special condition, the permit holder shall make additional notifications according to a schedule set forth by the Town Engineer so that storm water management facility installations can be inspected during construction.

(d) Infrastructure required as part of this ordinance shall be certified "as built" by a licensed professional engineer other than the Town Engineer. Completed storm water management practices which must shall pass a final inspection by the Town Engineer to determine if they are in accordance with the approved storm water plan and this chapter. The Town Engineer shall notify the permit holder in writing of any changes required in such practices to bring them into compliance with the conditions of this permit. The Town Engineer shall notify the permit holder when storm water management practices have passed final inspection.

(e) The permit holder shall notify the Town Engineer of any modifications it intends to make to an approved storm water plan. The Town may require the proposed modifications be submitted for approval prior to incorporation into the storm water plan and execution.

(f) The permit holder shall maintain all storm water practices in accordance with the storm water plan until the practices either become the responsibility of the Town or are transferred to subsequent private owners as specified in the approved maintenance agreement.

(g) The permit holder shall authorize the Town to perform any work or operations necessary to bring storm water measures into conformance with the approved storm water plan, and shall consent to a special assessment or charge against the property as provided under Wis. Stat. §§ 66.0627 or 66.0703 or to charging such costs against the financial guarantee posted in accordance with this chapter to cover the cost of such work or operations. The permit holder shall waive notice and hearing as provided by Wis. Stat. §66.0703(7)(b).

(h) The permittee shall be responsible for maintaining all roads, road right-of-ways, streets, runoff and drainage facilities and drainage ways as specified in the approved storm water plan until they are accepted and become the responsibility of a governmental entity.

(i) The permittee shall provide and install at its expense all drainage, runoff control and erosion control improvements as required by this chapter and the approved storm water plan, and also shall bear its proportionate share of the total cost of off-site improvements to drainage systems based upon the

existing developed drainage area or planned development of the drainage area, as determined by the Town Engineer.

(j) A copy of the storm water plan shall be available at the job site when land development or land disturbing activities are in progress.

(k) The permittee shall inspect, or cause to be inspected, the BMPs within 24 hours after each rain of 0. 5 inches or more which results in runoff during active construction periods, and at least once each week, make needed repairs and document the findings of the inspections in a site erosion control log with the date of inspection, the name of the person conducting the inspection, and a description of the present phase of the construction at the site.

(l) If so directed by the Town Engineer, the permit holder shall repair, at the permit holder's own expense, all damage to adjoining properties, municipal facilities and storm water drainage systems caused by storm water runoff, where such damage is caused by activities not in compliance with the approved storm water plan.

(m) The permit holder shall allow the Town Engineer access to the property for the purpose of inspecting the property for compliance with the approved storm water plan and this permit.

(n) If an approved storm water plan involves changes in direction of runoff, changes the post- development hydrology, increases the peak rate and/or total volume of runoff, the sediment loading and/or thermal pollution from a site, the Town Engineer may require the permittee to make appropriate legal arrangements with adjacent property owners concerning the prevention of endangerment to property or public safety.

(o) The permit holder is subject to the enforceable actions of this chapter if the permit holder fails to comply with the terms of this permit.

(6) PERMIT DURATION

(a) If the Town Engineer has notified the permit holder that all storm water practices have passed the final inspection as required under this ordinance, then the permit expires upon notification by the Town Engineer.

(b) The Town Engineer may extend an existing permit if continuous progress is being made by the applicant towards completion of storm water practices.

(7) APPEALS. Appeals shall be made in the form of a written document to the Board of Appeals. Upon receipt of the appeal, the Board of Appeals shall:

(a) Hear and decide appeals where it is alleged that there is error in any order, requirement, decision or determination made by the Town Engineer in administering this chapter.

(b) Authorize upon appeal in specific cases such variances from the terms of this chapter as will not be contrary to the public interest, where owing to special conditions a literal enforcement of the provisions of this chapter will result in practical difficulty or unnecessary hardship, so that the spirit of this chapter shall be observed, public safety and welfare secured and substantial justice done.

(c) The rules, procedures, duties and powers of the Board of Appeals shall apply to this chapter.

21.06 MAINTENANCE AND MONITORING AGREEMENTS

(1) MAINTENANCE AND MONITORING AGREEMENT REQUIRED. The maintenance and monitoring agreement required for storm water management practices under this chapter shall be an agreement between the Town and the permittee to provide for both short term and long term maintenance and monitoring of storm water management practices.

(a) The Maintenance and Monitoring Agreement shall provide for short-term maintenance and monitoring of storm water management practices necessary to maintain temporary drainage and erosion control measures and to establish permanent drainage and erosion control measures. Short-term maintenance provisions are generally those that do not continue in perpetuity.

(b) The Maintenance and Monitoring Agreement may provide for long-term maintenance and monitoring of storm water practices that continue in perpetuity. Such long-term maintenance will be required where the storm water practice serves an individual landowner or organized group of landowners. Agreements with long-term maintenance provisions shall be recorded with the County Register of Deeds and shall be binding upon all subsequent owners of land served by the storm water management practices.

(2) MONITORING REQUIREMENTS. Storm water facilities shall be monitored in accordance with the storm water plan, the conditions of the permit and the maintenance and monitoring agreement. Monitoring shall verify whether or not the practice is functioning as designed. Monitoring may include, but may not be limited to, quality, temperature and quantity of runoff.

(3) AGREEMENT PROVISIONS. The maintenance and monitoring agreement shall contain the following information and provisions:

(a) Identification of the storm water facilities and designation of the drainage area served by the facilities.

(b) A schedule for regular maintenance and monitoring of each aspect of the storm water management system consistent with the storm water plan.

(c) Identification of the landowner(s), organization, or municipality responsible for long-term maintenance and monitoring of the storm water practices.

(d) Commit the landowner(s), organization, or municipality to maintain and monitor storm water practices in accordance with the schedule included in the agreement.

(4) ADMINISTRATION. The Town Engineer is authorized to enforce the maintenance and monitoring agreement.

(a) The Town Engineer is authorized to access the property to conduct inspections and monitor the storm water practices as necessary to ascertain that the practices are being maintained and operated in accordance with the agreement.

(b) The Town Engineer shall maintain public records of the results of the site inspections, shall inform the landowner responsible for maintenance of the inspection results, and shall specifically indicate any corrective actions required to bring the storm water management practice into proper working condition.

(c) If the Town Engineer notifies the party designated under the maintenance and monitoring agreement of maintenance or monitoring problems that require correction, the party shall take the specific actions within a reasonable time as set.

(d) The Town is authorized to perform the corrective actions identified in the inspection report if the landowner does not make the required corrections in the specified time period. The Town shall initiate proceedings to impose the cost as a special assessment or charge against the property pursuant to Wis. Stat. §66.0627 or §66.0703 or to charge the cost against the financial guarantee posed under Section 7 of this chapter.

21.07 PERFORMANCE STANDARDS. Unless the Town Engineer gives prior written authorization, the methods in conformance with the Technical Standards shall be followed.

(1) GENERAL REQUIREMENTS FOR STORM WATER MANAGEMENT MEASURES. The following shall be observed in managing storm water runoff:

(a) Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used, to the extent possible, to meet the requirements of this chapter.

(b) Emergency overland flow for all storm water facilities shall be provided during and after construction to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.

(c) All storm water rate control facilities shall be located within drainage, utility and/or flowage easements to provide access and to prevent future alteration or encroachment.

(d) Water quality facilities are required for all developments unless a development is part of a Town approved regional pond drainage area.

(e) All hydrologic data shall be submitted to the Town Engineer. Data shall be obtained using NRCS methodology including, but not limited to, HydroCad or TR20/TR55 as defined by the NRCS.

(f) Hydrologic analysis shall be based on NRCS methods using a NOAA Atlas 14 storm distribution, 24-hour duration, and average soil moisture conditions (AMC-2), as defined by NRCS.

(g) Hydraulic calculations will be accepted in the Rational Method format or in commonly used software packages such as HydroCAD or XP-SWMM.

(h) Where appropriate, the plan shall include sediment controls to do all of the following to the maximum extent practicable:

1. Prevent tracking of sediment from the construction site onto roads and other paved surfaces.

2. Prevent the discharge of sediment as part of site de-watering.

3. Protect the separate storm drain inlet structure from receiving sediment.

(i) The use, storage and disposal of chemicals, cement and other compounds and materials used on the construction site shall be managed during the construction period, to prevent their entrance into waters of the state. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this paragraph.

(2) PEAK DISCHARGE RATE AND VOLUME. By design, BMPs shall be employed to meet the following performance standards.

(a) For a 1.5-inch rainfall event the proposed post-development runoff volume and peak flow rate must not exceed the runoff volume and peak flow rate for pre- development land use conditions. Post-development runoff volume discharged at a rate less than 0.006 cubic feet per second per acre of contributing watershed, and after the peak discharge has occurred, may be excluded from the computation of post-development runoff volume.

(b) For the 2-year, 10-year and 100-year rainfall event: the post-development peak flow rate shall not exceed the peak flow rate for pre-development land use conditions.

(c) Pre-development conditions shall assume "good hydrologic conditions for appropriate land covers as identified in TR-55 or an equivalent methodology. The meanings of "hydrologic soil group" and "runoff curve number" are as determined in TR-55. However, when pre-development land cover is cropland, rather than using TR-55 values for cropland, the runoff curve numbers in Table 1 shall be used.

Table 1
Maximum Pre-Development Runoff Curve Numbers

Hydrologic Soil Group	A	B	C	D
Cropland Curve Number	55	69		83
Grassland Curve Number	39	61	71	78
Woodland Curve Number	30	55	70	77

(3) INFILTRATION PRACTICES. BMPs shall be designed, installed, and maintained to infiltrate runoff to meet the runoff rate and volume requirements where Hydrologic Group A or B soils exist.

(a) Where infiltration practices will be used the location, surface area, depth, soil types (hydrologic group) and infiltration rate and volume computations shall be submitted to the Town Engineer.

(b) Pre-development condition shall be the same as in par. 2(c) above.

(c) Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

(d) Exclusions. The runoff from the following areas are prohibited from meeting the requirements of this paragraph:

1. Areas associated with tier 1 industrial facilities identified in §NR 216. 21(2)(a), Wis. Adm. Code, including storage, loading, rooftop and parking.

2. Storage and loading areas of tier 2 industrial facilities identified in §NR 216.21(2)(b), Wis. Adm. Code.

3. Fueling and vehicle maintenance areas.

4. Areas within 1000 feet up gradient or within 100 feet down gradient of karst features.

5. Areas with less than 3 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.

6. Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.

7. Areas within 400 feet of a community water system well as specified in §NR 811. 16(4), Wis. Adm. Code, or within 100 feet of a private well as specified in s. NR 812. 08(4), Wis. Adm. Code, for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.

8. Areas where contaminants of concern, as defined in §NR 720. 03(2), Wis.Adm. Code is present in the soil through which infiltration will occur.

9. Any area where the soil does not exhibit one of the following soil characteristics between the bottom of the infiltration system and the seasonal high groundwater and top of bedrock: at least a 3-foot soil layer with 20 percent fines or greater; or at least a 5-foot soil layer with 10 percent fines or greater. This does not apply where the soil medium within the infiltration system provides an equivalent level of protection.

(e) Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation, such alternate use shall be given equal credit toward the infiltration volume required by this paragraph.

(f) Infiltration systems designed in accordance with this paragraph shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive

action limit at a point of standards application in accordance with ch. NR 140, Wis. Adm. Code. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.

(g) Notwithstanding the above, the discharge from BMPs shall remain below the enforcement standard at the point of standards application.

(h) Assumed site infiltration rates shall be validated by the provisions of Wisconsin DNR Conservation Practice Standard #1002 Site Evaluation for Stormwater Infiltration.

(4) FUELING AND VEHICLE MAINTENANCE AREAS. Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the State contains no visible petroleum sheen.

(5) TOTAL SUSPENDED SOLIDS. BMPs shall be designed, installed and maintained to control total suspended solids carried in runoff from the post-construction site as follows:

(a) For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 85%, based on the average annual rainfall, as compared to no runoff management controls.

(b) For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on the average annual rainfall, as compared to no runoff management controls. A 40% total suspended solids reduction shall meet the requirements of this subdivision.

(c) All water quality analyses shall be based on the P8 Urban Catchment Model, or WinSLAMM, or other comparable model as approved by the Town Engineer..

(d) For this chapter, the average annual rainfall shall be consistent with NOAA Atlas 14.

21.08 FINANCIAL GUARANTEE

(1) ESTABLISHMENT OF THE GUARANTEE. The Town Engineer shall require the submittal of a financial guarantee, the form and type of which shall be acceptable to the Town Engineer, Town Attorney and Town Board. The financial guarantee shall be in an amount determined by the Town Board to be equal to the estimated cost of construction and the estimated cost of maintenance and monitoring during the period which the designated party in the maintenance and

monitoring agreement has maintenance and monitoring responsibility.. The financial guarantee shall give the Town Board the authorization to use the funds to complete the project or to fulfill maintenance and monitoring requirements if the landowner defaults or does not properly implement the approved storm water plan or fails to perform required maintenance and/or monitoring responsibilities.

(2) CONDITIONS FOR RELEASE. Conditions for the release of the financial guarantee are as follows:

(a) In consultation with the Town Engineer, the Town Board shall release the portion of the financial guarantee established to assure installation of storm water practices, minus any costs incurred by the Town to complete the project, upon submission and approval of "as built plans" by a licensed professional engineer. The Town Board may make provisions for a partial pro- rata release of the financial guarantee based on the completion of various development stages.

(b) The Town Board shall release the portion of the financial guarantee established to assure maintenance and monitoring of storm water practices, minus any costs incurred by the Town, at such time that the responsibility for such maintenance and monitoring is assumed by another entity through an approved maintenance and monitoring agreement.

21.09 COMPLIANCE ENFORCEMENT

(1) Any land development or land disturbing activity initiated after the effective date of this chapter by any person, firm, association or corporation subject to the chapter provisions shall be deemed a violation unless conducted in accordance with said provisions.

(2) The Town Engineer shall investigate and take action on all complaints made in regard to the application of this chapter. The Town Engineer is authorized to enter upon any public or private lands affected by this chapter to inspect the land prior to permit issuance for the purpose of determining whether to approve the plan and after permit issuance to determine compliance with this chapter. If permission to enter is denied prior to permit issuance the land development or land- disturbing activity that is the subject of the permit shall not occur. Following permit issuance, if permission cannot be received from the land occupier or land user, entry by the Town Engineer shall be pursuant to Wis. Stat. §66.0119.

(3) The Town Engineer shall notify the responsible owner or operator by personal service or certified mail of any non-complying land development or land disturbing activity. The notice shall describe the nature of the violation, remedial actions needed, a schedule for remedial action and additional enforcement action that may be taken.

(4) Upon receipt of written notification from the Town Engineer, the permit holder shall correct work that does not comply with the storm water plan or other provisions of the permit. The permit holder shall make corrections as necessary to meet the specifications and time schedule set forth by the Town Engineer in the notice. This provision also applies to land development or land disturbing activities that commenced under the approval process provided herein without obtaining a permit.

(5) The Town Engineer may revoke a permit issued under this chapter for non-compliance with chapter provisions. Any such revocation shall be subject to the provisions of Wis. Stat. Chapter 68. Any permit granted under this chapter may be revoked if the holder of the permit has misrepresented any material fact in the permit application or plan; or has failed to comply with the plan as originally approved or as modified in writing subsequently by the Town Engineer; has violated any provision of this chapter; or has violated any of the other conditions of the permit as issued to the applicant..

(6) Any permit revocation, stop-work order, or cease and desist order shall remain in effect unless retracted by the Board of Appeals, the Town Engineer or by a court of competent jurisdiction.

(7) The Town Engineer is authorized to post a stop-work order upon any land development or land disturbing activity in violation of this chapter. The Town Engineer shall supply a copy of each stop-work order to the Town Attorney. In lieu of the stop-work order, the Town Engineer may issue a written cease and desist order to any land occupier or land user whose activity is in violation of this chapter. These orders shall specify that the activity must be ceased or brought into compliance with the ordinance within 10 calendar days. Any such stop-work order or cease and desist order shall be subject to Chapter 68, Wis. Stats.

(8) Every violation of this chapter is a public nuisance. To the extent permitted by law, compliance with this chapter may be enforced by injunction pursuant to Wis. Stat. §62.23(8) in so far as the same are applicable.

(9) When the Town Engineer determines that the holder of a permit issued pursuant to this ordinance has failed to follow practices set forth in the Technical Standards or has failed to comply with schedules set forth in said storm water plan, the Town Engineer, or a party designated by the Town Engineer may enter upon the land and perform the work or other operations necessary to bring the condition of said lands into conformance with requirements of the approved plan. The Town Engineer shall keep a detailed accounting of all costs and expenses of performing such work. These costs and expenses shall be deducted from any financial security posted pursuant to this ordinance. Where such a security has not been established, or where such a security is insufficient to cover these costs, the costs

and expenses shall be imposed as a special assessment or charge pursuant to Wis. Stat. §66.0627 or §66.0703.

21.10 PENALTY. Except as otherwise provided, any person found to be in violation of any provisions of this chapter shall be subject to a penalty as provided in Section 25.04 of the General Code.