CHAPTER 14 EROSION CONTROL AND STORMWATER MANAGEMENT

SUBCHAPTER I MANURE STORAGE AND UTILIZATION

[History: Subch. I, 14.001 through 14.27 resc., Sub. 2 to 2018 OA-28, pub. 03/19/19.]

SUBCHAPTER II EROSION CONTROL AND STORMWATER MANAGEMENT

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12/12/05.]

SUBCHAPTER II EROSION CONTROL AND STORMWATER MANAGEMENT

14.401 SUBCHAPTER II. Subchapter II of this chapter consists of sections 14.40 through 14.81, inclusive.

[**History**: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; am., Sub. 1 to OA 2, pub. 11/30/05.]

14.40 AUTHORITY. This subchapter IIchapter is recommended by the Dane County Lakes and Watershed Commission and adopted by the Dane County Board of Supervisors under the authority of sec. 33.455 of the Wisconsin Statutes.

[**History**: 14.50 am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; am., OA 49, 1996-97, pub. 07/18/97; renum. from 14.50 and as renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]

14.41 DEFINITIONS. As used in subchapter II:

- **(1)** Affected means that a regulated activity has significantly:
- (a) caused negative impacts on water quality or the use or maintenance of land or business;
- **(b)** endangered health, safety, or general welfare.
- (2) Agricultural means related to or used 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 productions and wild crop harvesting. Clearing and grubbing of an area or structural development are not agricultural activity.

(2g)(3) Average annual rainfall means measured precipitation in Madison, Wisconsin between March 12 and December 2, 1981.

(2m)(4) Bank erosion means the removal of soil or rock fragments along the banks or bed of a stream channel resulting from high flow after rain events.

(3)(5) Best management practice means a practice, technique, or measure that is an effective, practical means of preventing or reducing soil erosion or water pollution, or both, from runoff both during and after land development activities. These can include structural, vegetative or operational practices.

(6) Closed watershed means an area that does not have a surface outlet, with water only able to leave through evaporation, infiltration, or mechanical means. For the purposes of this

<u>ordinance</u>, the following are considered closed watersheds:

(a) Internally drained watersheds that are at least 20,000 square feet in area and at least 1 foot in depth from invert to lowest surface outlet.

(b) Watersheds with no surface outlet discharges from a 2-year, 24-hour design storm.

(c) Areas that have historically not drained through surface outlets, as determined by the local approval authority.

(4)(7) Cold water community means surface waters capable of supporting a community of cold water fish and other aquatic life, or serving as a spawning area for cold water fish species (NR 102.04(3)(a), Wisconsin Administrative Code).

(4m)(8) Connected imperviousness means an impervious surface that is directly connected to a separate storm sewer or water of the state via an impervious or concentrated flow path.

(5)(9) Construction site erosion control means preventing or reducing soil erosion and sedimentation from land disturbing activity.

(10) Design storm means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall. The NRCS MSE4 24-hour storm distribution shall be used for stormwater calculations.

(5a)(11) Development means any of the following activities:

(a) Structural development, including construction of a new building or other structure;

(b) Expansion or alteration of an existing structure that results in an increase in the ground surface dimensions of the building or structure;

(c) Land disturbing activityies; or

(d) Creation or expansion of impervious surfaces.

(5e)(12) Direct Conduits to Groundwater means wells, sinkholes, swalletts, fractured bedrock at the surface, mine shafts, non-metallic mines, tile inlets discharging to groundwater, quarries, or depressional groundwater recharge areas over shallow fractured bedrock.

(5f)(13) Director means the Director of the Dane County Land and Water Resources Department or his or her designee.

(5m)(14) Effective infiltration area means the area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms or pretreatment.

(6)(15) Erosion (soil erosion) means the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

(7)(16) 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 resulting conditions.

(8)(17) Existing development means buildings and other structures and impervious area existing prior to August 22, 2001.

(9)(18) Fill means any act by which earth, sand, gravel, rock or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported, or moved to a new location and shall include the resulting conditions.

(19) Final stabilization means that all land disturbing activity has been completed and that a uniform perennial vegetative cover with a density of at least 70% has been established.

(10)(20) Financial security instrument means an irrevocable letter of credit, surety bond, performance bond, certified check, or cashier's check submitted to the local approval authority to assure that requirements of the ordinance are carried out in compliance with approved plans.

(21) Green Infrastructure means practices that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspirate stormwater and reduce flows to sewer systems or to surface waters. Green Infrastructure includes, but is not limited to, the following practices: rainwater harvesting/reuse, rain gardens, bioretention systems, infiltration basins, planters that are connected to roof drainage, vegetated swales, permeable pavement, green roofs, and rain barrels.

(11)(22) Gully erosion means a severe loss of soil caused by or resulting in concentrated flow of sufficient velocity to create a defined flow channel.

(12)(23) Heavily disturbed site means a site where an area of land is subjected to significant compaction due to the removal of vegetative cover or earthmoving activities, including filling.

(13)(24) Hydrologic soil group (HSG) has the meaning used in the runoff calculation methodology promulgated by the United States Natural Resources Conservation Service Engineering Field Manual for Conservation Practices.

(14)(25) Impervious surface means any land cover that prevents rain or melting snow from soaking into the ground, such as roofs (including overhangs), roads, sidewalks, patios, driveways and parking lots. For purposes of this chapter,

all road, driveway or parking surfaces including gravel surfaces, shall be considered impervious, unless specifically designed to encourage infiltration and approved by the local approval authority.

(15)(26) Infiltration, for the purposes of this ordinance, refers to any precipitation that does not leave the site as surface runoff. Also known as "stay-on".

(15m)(27) ——Infiltration system means a device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices such as swales or road side channels designed for conveyance and pollutant removal only.

(16)(28) Land conservation committee or LCC means the Dane County Land Conservation Committee created under sec. 92.06 of the Wisconsin Statutes.

(17)(29) Land disturbing activityies means any land alterations or disturbances that may result in soil erosion, sedimentation, or change in runoff including, but not limited to, removal of ground cover, grading, excavating, and filling of land.

(18)(30) Lightly disturbed site means a site where an area of land is subjected to minor compaction due to the limited removal of vegetative cover or earthmoving activities.

(19)(31)Local approval authority means the director in areas under the direct jurisdiction of Dane County as described in sec. 14.44(2) and (3). In incorporated areas that have adopted a local ordinance under sec. 14.44(3) and are in compliance, the term means the municipal staff, agency or contracted entity charged by the local unit of government with responsibility for enforcing stormwater and erosion control ordinances.

(20)(32) Local land division ordinance means any county, city, village or town ordinance adopted under chapter 236, Wis. Stats., to regulate the division of land.

(21)(33) Local zoning ordinance means any county, city, village or town ordinance adopted under sections 59.69, 59.692, 59.693, 60.61, 60.62, 61.351, 61.354, 62.23, 62.231, or 62.234 of the Wisconsin Statutes to regulate the use of land.

(21m)(34) Maximum extent practicable (MEP). A level of implementing best management practices in order to achieve a performance standard specified in this chapter

which takes into account the best available technology, cost effectiveness and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties and geographic features. *MEP* allows flexibility in the way to meet performance standards and may vary based on the performance standard and site conditions.

(22)(35) New development means any development that results in the cumulative increase of 20,000 square feet of impervious surface to a site since August 21, 2001. Sites may be a combination of new development and redevelopment. of the following activities:

(a) Structural development, including construction of a new building or other structure;

(b) Land-disturbing activities; or

(c) Creation or expansion of impervious surface.

(23)(36) Non-erosive velocity means a rate of flow of stormwater runoff, usually measured in feet per second, that does not erode soils. Non-erosive velocities vary for individual sites, taking into account topography, soil type, and runoff rates.

(24)(37) Peak flow means the maximum rate of flow of water at a given point in a channel, watercourse, or conduit resulting from the predetermined storm or flood.

(25)(38) Pervious surface means any land cover that permits rain or melting snow to soak into the ground.

(26)(39) Plan means an erosion control plan required by sec. 14.45 or a stormwater management plan required by sec. 14.46.

(27)(40) Plan review agency means the Dane County Land and Water Resources Department, or its successor, in areas under the direct administrative jurisdiction of Dane County as described in sec. 14.44(2). In incorporated areas of Dane County that have adopted a local ordinance under sec. 14.44(3) and are in compliance, the term means the municipal staff, agency or qualified contracted entity charged by the local unit of government with responsibility for reviewing stormwater and erosion control plans under the local stormwater and erosion control ordinance.

(28)(41) Plat review officer means the county or municipal staff, agency or contracted entity charged by the local unit of government with responsibility for reviewing land divisions, certified survey maps or subdivision-plats, or any combination thereof, under chapter 236 of the Wisconsin Statutes.

(29)(42) Post-development refers to the extent and distribution of land cover types anticipated to occur under conditions of full development of the submitted planafter proposed site development. This term is used to match pre and post-development stormwater peak flows as required by the ordinance.

(30)(43) Pre-development refers to the extent and distribution of land cover types present before the initiation of the proposed land development activity proposed development, assuming that all land uses prior to land disturbing activity development are in "good" condition as described in the Natural Resources Conservation Service Technical Release 55, Hydrology for Small Watersheds" (commonly known as TR-55). This term is used to match pre- and post-development stormwater peak flows as required by the ordinance. In a situation where Where the cumulative impervious surface created after August 21, 2001 exceeds the 20,000 sq.uare feet. threshold, the predevelopment conditions shall be those that prior to the proposed land disturbance August 21, 2001.

(30a)(44) Recharge means the portion of the average annual rainfall that infiltrates the soil and becomes groundwater. Recharge does not include evaporation, transpiration, or runoff from the site.

(31)(45) Redevelopment means development any that replaces existing impervious surfaces or results in the cumulative increase of less than 20,000 square feet of impervious surface to a site since August 21, 2001 on predominately developed as commercial, industrial, institutional of multifamily. Sites may a combination of new development and redevelopment.construction, alteration improvement exceeding four thousand square feet of land disturbance performed on sites where the existing site is predominantly developed as commercial, industrial, institutional or multifamily residential uses. Projects may include a mix of redevelopment and new impervious surfaces. New impervious surfaces added as a result of redevelopment are subject to s. 14.46(1).

(32)(46) Runoff curve number (RCN) has the meaning used in the runoff calculation methodology promulgated by the United States Natural Resources Conservation Service Engineering Field Manual for Conservation Practices.

(33)(47) Sediment means solid earth material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity or ice, and has come to rest on the earth's surface at a different site.

(34)(48) Sedimentation means the deposition of eroded soils at a site different from the one where the erosion occurred.

(35)(49) Sheet and rill erosion means a loss of soil caused by sheet flow or shallow concentrated flow, and characterized by an absence of channeling or a relatively uniform loss across the exposed upper layer of the soil or shallow irregular scouring of the soil surface.

(36)(50) Site means the bounded area described in an erosion control plan or stormwater management plan, including areas that are part of a larger common plan of development.

(37)(51) Slope means the net vertical rise over horizontal run, expressed as a percentage, which represents a relatively homogeneous surface incline or decline over the area disturbed.

(38)(52) Soil loss rate means the rate, usually measured in tons per acre per year, at which soil is transported beyond the perimeter of a given control site and which occurs as a result of sheet and rill erosion. This term does not apply to soil movement resulting from concentrated flow such as gully or bank erosion.

(39) Storm events mean the precipitation amounts that occur over a 24-hour period that have a specified recurrence interval for Dane County, Wisconsin. For example, one-year, two-year, 10-year and 100-year storm events mean the precipitation amounts that occur over a 24-hour period that have a recurrence interval of one, two, 10 and 100 years, respectively.

(40)(53) Stormwater means the flow of water which results from, and which occurs during and immediately following, a rainfall, snow- or icemelt event.

(41)(54) Stormwater management means any measures taken to permanently reduce or minimize the negative impacts of stormwater runoff quantity and quality after land development activities.

(42)(55) Stormwater runoff means the waters derived from rains falling or snowmelt or icemelt occurring within a drainage area, flowing over the surface of the ground and collected in channels, watercourses or conduits.

(43)(56) Street reconstruction means removal and replacement of the road subgrade, where

existing stormwater conveyance systems are modified.

(44)(57) Structure means any human-made object with form, shape and utility, either permanently or temporarily attached to, placed upon, or set into the ground, stream bed or lake bed.

(45)(58) Unnecessary hardship means that circumstance where special conditions, which were not self-created, affect a particular property and make strict conformity with regulations unnecessarily burdensome or unreasonable in light of the purposes of this ordinance.

[History: (4), (5), (6) and (7) cr., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; renum. from 14.51 and as renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (2) del., (1) renum. as (2), new (1), (2g), (2m), (4m), (5m), (15m) and (15r) cr., and (8), (15), (27), (30) and (31) am., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (30a) cr., sub. 1 to OA 4, 2006-07, pub. 08/31/06; (5e) cr. and (19) am., OA 23, 2006-07, pub. 12/29/06; (5a) cr. and (22) am., OA 39, 2008-09, pub. 06/08/09; (2), (5e), (10) am., (5f) cr., and (15r) del., OA 5, 2013-14, pub. 07/02/13.]

- 14.42 LEGISLATIVE FINDINGS. (1) The Dane County Board of Supervisors, acting upon the recommendation of the Dane County Lakes and Watershed Commission, finds that construction site erosion and uncontrolled stormwater runoff from land disturbing activity and land development activities have significant adverse impacts upon regional water resources and the health, safety, property and general welfare of the community, and diminish the public enjoyment and use of natural resources. Specifically, soil erosion and stormwater runoff can:
- (a) Carry sediment, nutrients, pathogens, organic matter, heavy metals, toxins and other pollutants to regional lakes, streams and wetlands:
- **(b)** Diminish the capacity of water resources to support recreational and water supply uses and a natural diversity of plant and animal life;
- **(c)** Clog existing drainage systems, increasing maintenance problems and costs;
- (d) Cause bank and channel erosion;
- (e) Increase downstream flooding;
- **(f)** Reduce groundwater recharge, which may diminish stream base flows and lower water levels in regional lakes, ponds and wetlands;
- (g) Contaminate drinking water supplies;
- **(h)** Increase risk of property damage and personal injury; and
- (i) Cause damage to agricultural fields and crops.
- **(2)** The Dane County Board of Supervisors finds that effective sediment and stormwater

management depends on proper planning, design, and timely installation of conservation and management practices and their continuing maintenance.

[**History**: am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; renum. from 14.52 and as renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]

- **14.43 PURPOSE AND INTENT.** (1) The purpose of this subchapter chapter is to set forth the minimum requirements for construction site erosion control and stormwater management that will diminish threats to public health, safety, public and private property and natural resources of Dane County.
- (2) This chapter is intended to regulate construction site erosion and stormwater runoff, to accomplish the following objectives:
- **(a)** Promote regional stormwater management by watershed;
- **(b)** Minimize sedimentation, water pollution from nutrients, heavy metals, chemical and petroleum products and other contaminants, flooding and thermal impacts to the water resources of Dane County;
- **(c)** Promote infiltration and groundwater recharge;
- **(d)** Protect functional values of natural water courses and wetlands;
- **(e)** Provide a single, consistent set of performance standards that apply to all developments in both the unincorporated and incorporated areas of Dane County;
- (f) Achieve an 80% reduction in sediment load rates to Dane County waters compared to no controls for all new development, a 40% reduction in sediment load rates compared to no controls for all redevelopment and street reconstruction, and a 20% reduction in sediment load rates compared to no controls for existing developments;
- **(g)** Ensure no increase in temperature of stormwater post-construction development in order to protect cold water communities;
- (h) Ensure no increase in the rate of surface water drainage from sites during or after construction; and
- (i) Protect public and private property from damage resulting from runoff or erosion. [History: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]
- **14.44 JURISDICTION AND ADMINISTRA- TION. (1)** This ordinance applies to all areas of Dane County.
- **(2)** Unincorporated areas. This ordinance shall become effective in all unincorporated areas of Dane County 12 months after it is published.

The director, in consultation with the Dane County Conservationist, shall be responsible for administration and enforcement of this ordinance.

- (3) Incorporated areas. (a) Cities and villages wholly or partially in Dane County may assume administration and regulation of soil erosion and stormwater control programs if they have stormwater and erosion adopted control ordinances that include standards at least as restrictive as those described in ss. 14.41, 14.45 - 14.53 and 14.71 - 14.73. Any such ordinance shall supercede any less restrictive or conflicting provision of a minimum standard, ordinance or local regulation previously adopted by that municipality and shall include effective measures for consistent administration and enforcement. Cities and villages shall have the discretion to adopt by ordinance their own equivalent internal procedures for administration of county standards.
- (b) Cities and villages that have enacted local ordinances pursuant to par. (a) or entered into s. 66.0301, Wis. Stats., intergovernmental cooperative agreements with the county consistent with this ordinance may assume responsibility for administration and regulation of soil erosion and stormwater control programs. When a city or village assumes responsibility for administration and regulation of soil erosion and stormwater control consistent with ordinance, references in this chapter to the director shall mean the local approval authority as designated by the municipal government.
- (c) If a municipality does not enact an ordinance pursuant to par. (a) by the effective date of this ordinance, or if the Dane County Lakes & Watershed Commission, after notice and hearing, determines that a municipality has enacted an ordinance that fails to meet the standards of ss. 14.41, 14.45 14.51, 14.53 and 14.71 14.73, the director shall enforce the provisions of this ordinance within the limits of the municipality. The director shall continue to administer and enforce the provisions of this ordinance until the municipality adopts and enforces an ordinance at least as restrictive as the county ordinance.
- (d) If the Dane County Lakes & Watershed Commission, after notice and hearing, determines that a municipality is not providing effective administration and enforcement of an ordinance adopted under this section, it may make a finding of noncompliance with this ordinance. If a municipality is found to be in noncompliance, the director shall administer and

enforce the provisions of this ordinance within the limits of the municipality, to the extent necessary to assure compliance. The director shall continue to administer and enforce the provisions of this ordinance until the Dane County Lakes and Watershed Commission rescinds its finding of noncompliance.

(4) Where the standards of this ordinance differ or conflict with applicable local land division, zoning, shoreland zoning or other applicable local ordinances or state regulations, the more restrictive standards shall apply.

[**History**: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (1) and (3) am., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (2) and (3) am., OA 23, 2006-07, pub. 12/29/06.]

14.45 APPLICABILITY OF REQUIREMENT FOR EROSION CONTROL PLANSPERMITS.

[INTRO.] Unless expressly exempted by sec. 14.47, an erosion control permit under sec. 14.49 shall be required and all construction site erosion control provisions of this chapter shall apply, to any of the following activities in Dane County:

- (1) Land disturbing activity in excess of 4,000 square feet;
- (2) Land disturbing activity that involves the excavation and/or filling, or a combination of excavation and filling, in excess of 400 cubic vards of material:
- (3) Land disturbing activity that disturbs more than 100 lineal feet of road ditch, grass waterway or other land area where surface drainage flows in a defined open channel; including the placement, repair or removal of any underground pipe, utility or other facility within the cross-section of the channel;
- **(4)** Any new public or private roads or access drives longer than 125 feet;
- **(5)** Development that requires a subdivision plat, as defined in the applicable local land division ordinance(s);
- (6) Land disturbing activity that disturbs less than 4,000 square feet of land, including the installation of access drives, that the local approval authority determines to have a high risk of soil erosion or water pollution, or that may significantly impact a lake, stream, or wetland area. Examples of activities with a high risk of soil erosion or water pollution may include, but are not limited to, land disturbance on erodible soil or disturbance adjacent to lakes, rivers, streams or wetlands. All such determinations made by the local approval authority shall be in writing, unless waived by applicant.

[History: (1) rep. and recr., OA 45, 1987-88, pub. 05/05/88; am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95;

renum. from 14.53 and as renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (2) del. and (3)-(7) renum. as (2)-(6)., OA 5, 2013-14, pub. 07/02/13.]

- APPLICABILITY OF REQUIREMENT 14.46 **FOR STORMWATER** CONTROL MANAGEMENT PERMITS. [INTRO.] Unless otherwise exempted by sec. 14.47, a stormwater control management permit under sec. 14.49 shall be required and all stormwater management provisions of this chapter shall apply to any of the following activities within Dane County:
- (1) Any development(s) after August 22, 2001 that result(s) in the cumulative addition of 20,000 square feet of impervious surface to the site.
- **(2)** Any development that requires a subdivision—plat, as defined in applicable local land division ordinance(s).
- (3) Any development that requires a certified survey map, as defined in the applicable local land division ordinance(s); for property intended for commercial or industrial use.
- (4) Land disturbing activity in excess of 4,000 square feet on sites predominately developed as commercial, industrial, institutional or multifamily. Redevelopment, as defined in s. 14.41(31).
- (5) Other land development activities including, but not limited to, redevelopment or alteration of existing buildings and other structures, that the local approval authority determines may significantly increase downstream runoff volumes, flooding, soil erosion, water pollution or property damage, or significantly impact a lake, stream, or wetland area. All such determinations shall be made in writing unless waived by the applicant.

[History: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (4) am., Sub. 1 to OA 10, 2001-02, pub. 01/07/02, eff. 08/22/02; (1) and (4) am. and (1m) cr., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (1m) del., OA 5, 2014-13, pub. 07/02/13.]

14.47 EXEMPTIONS AND CLARIFICATIONS.

- (1) The following activities are exempt from all requirements of this ordinance:
- (a) Any activity directly related to the planting, growing and harvesting of agricultural crops except the construction of a building or other structure.
- (b) Projects specifically exempted from local erosion control ordinances under state or federal statute. It is the responsibility of the landowner to demonstrate such exemption with documentation demonstrate to the local approval authority.

- (2) The following activities are exempt from the construction site erosion control provisions of sec. 14.45:
- (a) One- and two-family dwelling units regulated under the Wisconsin Uniform Dwelling Code. Land disturbing activityies in excess of one (1) acre, or not associated with the construction of a dwelling, are not exempt from this chapter.
- (b) Projects specifically exempted from local erosion control ordinances under state or federal statute. It is the responsibility of the landowner to domonstrate such exemption with documentation acceptable to the local approval authority.
- (e)(b) Projects subject to an approved shoreland erosion control permit under chapter 11.
- (d)(c) Maintenance of existing cropped fields with a prior approved conservation plan.
- (d)f) Soil conservation, stream and adjacent wetland protection and restoration practices such as terraces, run-off diversions, grassed waterways, cattle and equipment crossings, cattle watering access, water control structures, dikes, ditch plugs, tile breaks and sediment removal catchments, when implemented according to plans and designs approved by the Natural Resources Conservation Service or U.S. Fish & Wildlife Service of the U.S. Department of the Interior, Wisconsin Department of Natural Resources or the Dane County Land and Water Resources Department, provided that any such project involving land disturbing activity equal to or greater than one (1) acre shall also comply with the performance standards in s. 14.50(3).
- (3) The following are exempt from the runoff rate control standards of sec. 4.51(2)(cm):
- (a) Redevelopment
- (b)e) Municipal road or county highway projects not exempted under s. 14.47(2)(b) are exempt from s. 14.51(2)(c) where all of the following conditions are met:
- 1. The purpose of the project is only to meet current state or federal design or safety guidelines;
- **2.** All activity takes place Proposed impervious areas are within existing public right-of-way:
- 3. All other requirements of s. 14.51 are met; and
- **4.** The project does not include the addition of new driving lanes.
- _(f) Soil conservation, stream and adjacent wetland protection and restoration practices such as terraces, run-off diversions, grassed waterways, cattle and equipment crossings, cattle watering access, water centrel structures,

dikes, ditch plugs, tile breaks and sediment removal catchments, when implemented according to plans and designs approved by the Natural Resources Conservation Service or U.S. Fish & Wildlife Service of the U.S. Department of the Interior, Wisconsin Department of Natural Resources or the Dane County Land and Water Resources Department, provided that any such project involving land disturbing activity equal to or greater than one (1) acre shall also comply with the performance standards in s. 14.50(3).

- (43) The following activities are exempt from the infiltration standards described in s. 14.51(2)(e):
- (a) Redevelopment sites.
- **(b)** New development sites—with less than 10% connected imperviousness, based on complete development of the post construction site, provided the cumulative area of all impervious surface is less than one acre.
- (c) Agricultural facilities and practices.
- (d) Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the bottom of the proposed infiltration system where the soil layer is not easily removed or manipulated.
- (e) Expansion of municipal or county roads.
- **_(e)** Parking areas and access roads less than 5,000 square feet for commercial and industrial development.
- <u>(f) Roads in commercial, industrial and institutional land uses, and arterial roads.</u>

[**History**: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (1), (2) and (3) am. and (4) rep., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (2) am., OA 39, 2008-09, pub. 06/08/09; (1)(a) and (2)(d) am., OA 5, 2013-14, pub. 07/02/13.]

14.48 PRELIMINARY REVIEW LETTER.

- (1) Purpose and intent. A preliminary review letter provides a potential permit applicant with an initial simple evaluation of whether erosion and stormwater control standards can be met for a proposed site, lot layout, construction design. This review is intended to assist applicants in preparing general site plans and other submittals necessary to obtain an erosion control and stormwater permit. A preliminary review letter does not guarantee that an erosion or stormwater control plan will be approved or that a permit will be issued. Erosion and stormwater control plans and permit applications must meet all applicable standards and criteria for approval.
- **(2)** Application procedure. **(a)** The local approval authority may adopt an application procedure and fees for provision of a preliminary review letter.

- **(b)** The local approval authority may charge a fee to compensate for the cost of the preliminary review letter process.
- **(c)** Any person may apply for a preliminary review letter by submitting an application that contains the information required by the local approval authority.
- (d) The local approval authority may require a preliminary review letter prior to accepting an application for a zoning permit, petition to rezone or conditional use permit under applicable ordinance(s), or the plat review officer may require a preliminary review letter prior to accepting an application for a certified survey map under applicable local land division ordinance(s) where any of the following apply:
- 1. The proposal would involve one or more acres within either the current or proposed boundaries of a commercial zoning district;
- **2.** Proposed lot or rezone area configuration would necessitate driveways, access roads or other construction that would clearly require an erosion control plan or stormwater management plan under sec. 14.45 or 14.46;
- 3. Natural features of the site including, but not limited to, slope, soils, wetlands, or hydrology are such that, in the opinion of the local approval authority, substantial risk of erosion, flooding or other environmental or public safety hazard exists; or, in the opinion of the plat review officer, consultation with plan review agency staff is necessary to determine land suitability requirements under local subdivision ordinances.
- **(e)** Unless expressly waived by the applicant, decisions by the local approval authority to require a preliminary review letter shall be made in writing and shall detail the reasons why the authority believes there to be a substantial risk of erosion, flooding or hazard.

[**History**: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (2)(d) am., Sub. 1 to OA 2, 2005-06, pub. 11/30/05.]

14.49 EROSION AND STORMWATER CONTROL PERMITS AND ADMINISTRATION.

- (1) No activity meeting the criteria described in ss. 14.45 or 14.46 shall occur and no zoning permit may be issued, until an erosion control and stormwater control permit is issued by the local approval authority.
- (2) The applicant must provide the following when requesting a permit:
- (a) Completed application form_signed by the landowner or easement holder. If the applicant is not the landowner or easement holder, a notarized statement authorizing the applicant to act on behalf of the landowner or easement

- holder must be provided. By signing the statement, the landowner or easement holder shall be bound by all requirmeents of this ordinance and the terms of any permit issued to the applicant;
- _1. The application must be signed by the landowner or include a notarized statement signed by the landowner authorizing the applicant to act as the landowner's agent and bind the landowner to the terms of this ordinance.
- 2. If a landowner appoints an agent to submit an application pursuant to (2)(a)1., the landowner shall be bound by all of the requirements of this ordinance and the terms of any permit issued to the agent.
- (b) Fees as required by sec. 14.55;
- **(c)** Copy of preliminary review letter, as described in sec. 14.48, if applicable;
- (d) If required by sec. 14.45, an erosion control plan meeting all the standards of sec. requirements of sec. 14.50, or a simplified checklist as described in sec. 14.50.
- 1. Simplified plan materials, described in sec 14.50(2), may be provided for sites with land disturbance less than 20,000 square feet, slopes steeper than 6% disturbed for less than 15 days, and slopes flatter than 6% disturbed for less than 6 months.
- **(e)** If required by sec. 14.46, a stormwater management plan meeting all of the standards of sec. 14.51 and a draft maintenance agreement as described in sec. 14.51(1)(i);
- **(f)** Copies of permits or permit applications or approvals required by any other governmental entity:
- **(g)** A proposed timetable and schedule for completion and installation of all elements of approved erosion control and stormwater management plans and a detailed schedule for completion of construction.
- **(h)** An estimate of the cost of completion and installation of all elements of the approved erosion control and stormwater management plans.
- (i) Evidence of financial responsibility to complete the work proposed in the plan. The local approval authority may require a financial security instrument sufficient to guarantee completion of the project.
- (3) Approval process. (a) The local approval authority shall verify that the permit application is complete under s. 14.49(2). The local approval authority shall then forward plan(s) to the plan review agency for review and approval. Plan review staff shall review the plan(s) for

- compliance with the standards identified in ss. 14.50-14.51. Additional information may be requested at any time to help determine ordinance compliance.
- **(b)** Within the timeframe set by the local approval authority, plan review staff shall either approve the submitted plan or notify the local approval authority of any deficiencies. Staff engaged in this review and approval process shall be certified where appropriate by the Wisconsin Department of Commerce for this purpose.
- **(c)** The local approval authority shall notify the applicant in writing of any deficiency in the proposed plan and the applicant shall be given an opportunity to correct any deficiency.
- (d) Where installed stormwater practices will be privately-owned implemented, an affidavit which describes the property bγ legal notifying prospective description, future purchasers of the existence of a stormwater permit issued under this ordinance applicable plan, timetables and potential liability imposed by sec. 14.73(3) for failure to bring the property into compliance with this ordinance after notification, shall be recorded with the Dane County Register of Deeds prior to issuance of an erosion and stormwater control permit. foregoing information shall also be noted on every plat and certified survey map.
- **(e)** Upon approval of the plan review agency, the erosion control or stormwater management permit shall be issued by the local approval authority after the applicant has met all other requirements of this ordinance.
- (4) Permit conditions. (a) The plan shall be implemented prior to the start of any land disturbing activity and shall be maintained over the duration of the project. Stormwater components of the plan shall be maintained in perpetuity.
- **(b)** The permittee is responsible for successful completion of the erosion control plan and the stormwater management plan. The permittee shall be liable for all costs incurred, including environmental restoration costs, resulting from noncompliance with an approved plan.
- **(c)** Application for a permit shall constitute express permission by the permittee and landowner for the local approval authority to enter the property for purposes of inspection under sub. (5) or curative action under sec. 14.73(3). The application form shall contain a prominent provision advising the applicant and landowner of this requirement.

- **(d)** All incidental mud-tracking off-site onto adjacent public thoroughfares shall be cleaned up and removed by the end of each working day using proper disposal methods.
- **(e)** A copy of the approved permit and erosion control plan shall be kept on the project site, in a place readily accessible to contractors, engineers, local approval authority inspection staff and other authorized personnel.
- (5) Inspections. (a) Application for a permit under this ordinance shall constitute permission by the applicant and landowner for the local approval authority to enter upon the property and inspect during the construction phase prior to the inspections pursuant to paragraphs (d) and (f), as necessary to confirm compliance with the requirements of this ordinance.
- **(b)** As part of the plan approval process, the local approval authority shall determine the minimum inspection frequency required to assure compliance. The minimum frequency shall not be greater than every 30 days. The site shall be inspected by the local approval authority during the construction phase at the frequency specified.
- (c) The permittee shall notify the local approval authority within 10 days after installation of all practices in an approved erosion control plan and achievement of soil stabilization. The permittee shall inspect the site weekly, and prior to every forecasted rain fall of ½ inch or greater.
- **(d)** The local approval authority shall inspect the property to verify compliance with the erosion control plan within 10 days of notification of soil stabilization.
- (e) Within 10 days after installation of all practices in an approved stormwater management plan, the permittee shall notify the local approval authority and submit drawings documenting construction. A professional engineer shall submit as-built certification to ensure that constructed stormwater management practices and conveyance systems comply with the specifications included in the approved plans. At minimum, The as-built certification shall include a set of drawings, stamped by a professional engineer, comparing the approved stormwater management plan with what was Other information shall be constructed. submitted as required by the local approval authority.
- **(f)** The local approval authority shall inspect the property to verify compliance within 30 days of notification.

- **(g)** Maintenance is the responsibility of the owner, and facilities are subject to inspection and orders for repairs.
- **(6)** Permit transfers. **(a)** When a permittee and landowner act to transfer an interest in property subject to an approved plan prior to completion of the proposed steps to attain soil stabilization, the permittee must secure approval from the local approval authority.
- **(b)** When a permittee and landowner transfer ownership, possession or control of real estate subject to either or both an uncompleted erosion control stormwater management plan, the successor in interest to any portion of the real estate shall be responsible to control soil erosion and runoff and shall comply with the minimum standards provided in this ordinance.
- **(c)** When ownership, possession or control of property subject to an uncompleted erosion control or stormwater management plan, or both, is transferred, the former owner (seller) shall notify the new owner (buyer) as to the current status of compliance with notice to the authority, and provide a copy of the erosion control plan or stormwater management plan, or both.
- **(d)** Transfers of interest in real estate subject to an approved, uncompleted plan may be conducted consistent with this ordinance under any of the following arrangements:
- **1.** The transferee shall file a new, approved erosion control or stormwater management plan, or both, with the authority;
- 2. The transferee shall obtain an approved assignment from the authority as sub-permittee to complete that portion of the approved plan regulating soil erosion and runoff on the transferee's property.
- The permittee shall provide the authority with a duly completed and executed continuing surety bond or certified check in an amount sufficient to complete the work proposed in the approved plan; at the time of transfer the permittee may seek to reduce the surety bond or certified check to the appropriate amount to complete remaining work. If the transferor enters into escrow agreements with transferees to complete an approved plan, these funds shall be available to the authority to attain plan compliance. When an approved erosion control plan and, if required, a stormwater management plan is or are not completed as proposed, the authority may use the surety bond to complete remaining work to achieve plan compliance.
- (7) Plan or permit amendments. Any proposed modifications to approved plans, construction schedules or alterations to accepted sequencing

- of land disturbing site—activityies shall be approved by the director prior to implementation. A maximum of five permit revisions may be allowed.
- (8) Timeframe and Expiration:
- (a) Erosion control plan timetables and construction schedules must begin within one year of the date the permit application is filed.
- **(b)** All permit applications shall expire upon the earlier of:
- 1. Oene year after the applicant is notified of, but does not adequately address, a deficiency, from the date the applicant is notified of an application deficiency, if the applicant has not submitted additional information to adequately address the deficiency within the year, up toer
- **2.** A maximum of three years from the date of application.
- (c) Erosion control permits shall expire:
- 1. <u>Uupon</u> the stabilization date included in the approved plan and included in the analysis provided to meet the requirements of 14.50(3)(a)2, up to-
- 2. Aa maximum of three years after the permit issuance is issued.

[**History**: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (3)(d) and (4)(c) am., (4)(e) cr., and (8), (9) and (10) rep., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (5)(e) and (f) am., OA 39, 2008-09, pub. 06/08/09; (5)(b)-(c), (7) am., (8) cr., OA 5, 2013-14, pub. 07/02/13.]

- 14.50 EROSION CONTROL PLAN REQUIRE-MENTS. (1) Plan materials. Erosion control plans required under section 14.45 may include consideration of adjoining landowners' cooperative efforts to control transport of sediment and except as specifically exempted below, shall include, at a minimum, the following information:
- (a) property lines, lot dimensions, and limits of disturbed area, including disturbed areas within five (5) feet of the property line;
- **(b)** limits of impervious area, including buildings. Include all public and private roads, interior roads, driveways, parking lots, and indicate type of paving and surfacing material;
- (c) All natural and artificial water features including, but not limited to, lakes, ponds, streams (including intermittent streams), and ditches; and areas of natural woodland or prairie. The plan must show ordinary high-water marks of all navigable waters, 100-year flood elevations and delineated wetland boundaries. A certified flood zone determination and/or wetland delineation may be required at the applicant's expense;

- (d) cross sections of and profiles of channels, swales, and road ditches;
- (e) culvert sizes;
- (f) direction of flow of runoff;
- (g) watershed size for each drainage area;
- **(h)** design discharge for ditches and structural measures:
- (i) runoff velocities;
- (j) fertilizer and seeding rates and recommendations;
- **(k)** time schedules for stabilization of ditches and slopes;
- (I) description of methods by which sites are to be developed and a detailed land disturbance schedule including time schedules for stabilization of ditches and slopes;
- (m) provision for sequential steps mitigating erosive effect of land disturbing activityies to be followed in appropriate order and in a manner consistent with accepted erosion control methodology suitable to proposed sites and amenable to prompt re-vegetation, including runoff calculations as appropriate;
- (n) provisions to prevent mud-tracking off-site onto public thoroughfares during the construction period;
- **(o)** provisions to disconnect impervious surfaces, where feasible;
- **(p)** provisions to prevent sediment delivery to, and accumulation in, any proposed or existing stormwater conveyance systems;
- (q) copies of permits or permit applications required by any other unit of government or agency;
- **(r)** existing and proposed elevations (referenced to the North American Vertical Datum of 1988, where available) and existing and proposed contours in the area, where deemed necessary;
- **(s)** any other information necessary to reasonably determine the location, nature and condition of any physical or environmental features of the site.
- (2) Simplified plan checklistmaterials. Applicants may submit erosion control proposals using simplified checklists of standard erosion control practices, on a standard form approved by the local approval authority, wherever all of the following conditions exist:
- (a) The site does not exceed 20,000 square feet in area;
- (b) Soil on slopes steeper than 6% will be disturbed for less than 15 days; and
- (c) Soil on slopes less than 6% will be exposed for less than 6 months.

- (2m) Simplified plan checklists shall be reviewed by the local approval authority for completeness and accuracy. Sites meeting the conditions of sec. 14.49(d)1. may instead provide, at a minimum, the following information:
- (a) Narrative describing the project;
- (b) Site plan of known scale that includes property lines, disturbed area limits, impervious area limits (existing and proposed), natural and artificial water features, 100-yr flood plain, delineated wetland boundaries, and location of all proposed erosion control practices;
- (c) Contours (existing and proposed);
- (d) Watershed size for each drainage area, including areas draining to the site;
- **(e)** Provisions to prevent tracking sediment onto public roads:
- (f) Provisions to prevent sediment delivery to, and accumulation in, any proposed or existing stormwater conveyance systems;
- (g) Proposed erosion control practices
- (h) Construction schedule that includes dates of erosion control practice installation, start of land disturbance and site stabilization.
- (i) Culvert sizes (existing and proposed)
- (j) Any other information necessary to reasonable determine the location, nature and conditions of any physical or environmental features of the site.
- (3) Erosion control performance standards.
- (a) Proposed design, suggested location and phased implementation of effective, practicable erosion control measures for plans shall be designed, engineered and implemented to achieve the following results:
- 1.(a) Prevent gully and bank erosion;
- 2.(b) —Limit total off-site permissible annual aggregate soil loss for exposed areas resulting from sheet and rill erosion to an annual, cumulative soil loss rate not to exceed 7.5 tons5.0 tons sediment yield per acre annually, as determined using the U.S. Natural Resources Conservation Service Technical Guide or another commonly accepted soil erosion methodology approved by The Dane County Land and Water Resources Department, that considers season of year, site characteristics, soil erodibility and slope. Erosion control measures for plan approval need not attempt to regulate soil transportation within the boundaries of the applicant's site.
- (c) Provide stable outlet capable of carrying designed discharge flow as required in s. 14.51(2)(c), ; and

- 3. Discharges from new construction sites must have a stable outlet capable of carrying designed flow as required in s. 14.51(2)(cm), at a non-erosive velocity. Outlet design must consider flow capacity and flow duration. This requirement applies to both the site outlet and the ultimate outlet to stormwater conveyance or waterbody.
- (d) Prevent or reduce all of the following:
- 1. The deposition of soil from being tracked onto streets by vehicles.
- 2. The discharge of sediment from disturbed areas into on-site storm water inlets.
- 3. The discharge of sediment from disturbed areas into adjacent waters of the state.
- 4. The discharge of sediment from drainage ways that flow off the site.
- **5.** The discharge of sediment by dewatering activities.
- **6.** The discharge of sediment eroding from soil stockpiles existing for more than 7 days.
- 7. The transport by runoff of chemicals, cement and other building compounds and materials on the construction site during the construction period.
- (4) Implementation. The BMPs used to comply with this section shall be implemented as follows:
- (a) Erosion and sediment control practices shall be constructed or installed before land disturbing activity begins.
- **(b)** Erosion and sediment control practices shall be maintained until final stabilization.
- (c) Final stabilization activity shall commence when land disturbing activity ceases and final grade has been reached on any portion of the site.
- (d) Temporary stabilization activity shall commence when land disturbing activity has temporarily ceased and will not resume for a period exceeding 14 calendar days.
- (e) BMPs that are no longer necessary for erosion and sediment control shall be removed.
- (b) Plan compliance under par. (a) shall be determined using the U.S. Natural Resources Conservation Service Technical Guide or another commonly accepted soil erosion methodology approved by the Dane County Conservationist, that considers season of year, site characteristics, soil erodibility and slope.
- (c) Erosion control measures for plan approval need not attempt to regulate soil transportation within the boundaries of the applicant's site.
- (5) Grading within five (5) feet of property line.(d)
- 1. Except as authorized in this section, the topography within five (5) feet of any property

line at the commencement of any development shall remain unchanged.

- (a)a. When land disturbing activityies associated with development occur within five (5) feet of any property line, finished grades in that area shall be restored to the topography in existence before the land disturbing activity began. A positive slope of one-half (1/2) inch vertical per one (1) foot horizontal within five (5) feet of the property line is allowed to provide proper drainage away from a one or two family residence.
- b.(b) The established grade of the adjoining property shall determine the finished grade at the property line for any development. The owner of the property under development bears the burden of proof as to the established grade at the property line and the topography within five (5) feet of the property line. The director of the Department of Land and Water Resources may require detailed site grading plans of existing and proposed conditions to be submitted before commencement of land disturbing activities.
- **2.(c)** Existing drainage ways and drainage easements along property lines shall be maintained including, but not limited to, natural watercourses and stormwater management areas shown on subdivision—plats and certified survey maps.
- **3.(d)** Development in Floodplain Districts requiring fill to comply with chapter 17 is exempt from this subsection.
- **4.(e)** Upon written application, tThe director of the Department of Land and Water Resources may authorize exceptions—grading resulting in changes to the existing topography at and within five (5) feet of any property line, that would promote the purposes stated in this ordinance if the following are provided:
- 1. The intent of the grading and an explanation of its necessity, and
- 2. Documentation showing that stormwater runoff will not negatively affect adjacent properties.-

An exception authorized under this subsection may not direct additional stormwater runoff toward adjacent properties. Proposed exceptions may include, but are not limited to, retaining walls, berms and other structures, and other changes to existing grade at and within five (5) feet of a property line. The director of the Department of Land and Water Resources may require the submittal of detailed site grading plans of existing and proposed conditions

including, but not limited to, detailed topographical information of the subject and adjoining properties, before land disturbing activities commence.

[History: 14.54 am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; 14.545 cr., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; ss. 14.54 and 14.545 combined and renum. as 14.50 and as combined and renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; 14.50 am., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (1)(r) and (2) am., OA 39, 2008-09, pub. 06/08/09; (3)(d) cr., OA 13, 2009-10, pub. 11/19/09.]

- **14.51 STORMWATER MANAGEMENT PLAN REQUIREMENTS. (1)** Plan materials. Stormwater management plans shall satisfy all of the requirements in 14.51(2), and shall address at a minimum the following information:
- (a) A narrative describing the proposed project, including implementation schedule for planned practices:
- **(b)** Identification of the entity responsible for long-term maintenance of the project;
- **(c)** A map showing drainage areas for each watershed area;
- **(d)** A summary of runoff peak flow rate calculations, by watershed area, including:
- 1. Pre-existing peak flow rates;
- **2.** Post-construction development peak flow rates with no detention;
- **3.** Post-construction development peak flow rates with detention;
- Assumed runoff curve numbers (RCNs); and
- **5.** Time of concentration (Tc) used in calculations.
- **(e)** A complete site plan and specifications, signed by the person who designed the plan. All plans shall be drawn to an easily legible scale, shall be clearly labeled, and shall include, at a minimum, all of the following information:
- 1. Property lines and lot dimensions;
- **2.** All buildings and outdoor uses, existing and proposed, including all dimensions and setbacks;
- **3.** All public and private roads, interior roads, driveways and parking lots. Show traffic patterns and type of paving and surfacing material;
- **4.** All natural and artificial water features including, but not limited to lakes, ponds, streams (including intermittent streams), and ditches. Show ordinary high water marks of all navigable waters, 100-year flood elevations and delineated wetland boundaries, if any. If not available, appropriate flood zone determination

or wetland delineation, or both, may be required at the applicant's expense:

- 5. Depth to bedrock;
- **6.** Depth to seasonal high water table;
- 7. The extent and location of all soil types as described in the Dane County Soil Survey, slopes exceeding 12%, and areas of natural woodland or prairie;
- **8.** Existing and proposed elevations (referenced to the North American Vertical Datum of 1988, where available) and existing and proposed contours in the area requiring a grading and filling permit;
- **9.** Elevations, sections, profiles, and details as needed to describe all natural and artificial features of the project;
- **10.** Soil erosion control and overland runoff control measures, including runoff calculations as appropriate;
- 11. Detailed construction schedule;
- **12.** Copies of permits or permit applications required by any other governmental entities or agencies;
- **13.** Any other information necessary to reasonably determine the location, nature and condition of any physical or environmental features:
- **14.** Location of all stormwater management practices;
- **15.** All existing and proposed drainage features;
- **16.** The location and area of all proposed impervious surfaces; and
- 17. The limits and area of the disturbed area.
- **(f)** Engineered designs for all structural management practices;
- **(g)** A description of methods to control oil and grease or written justification for not providing such control;
- **(h)** If required under sub. (2)(f), a description and plans to control temperature of runoff;
- (i) A maintenance plan and schedule for all permanent stormwater management practices as recorded on the affidavit required in sec. 14.49(3)(d).
- (j) A summary of infiltration calculations including:
- **1.** Pre-development infiltration volume.
- **2.** Calculated infiltration volume goal.
- Achieved post—development infiltration volume.
- **(k)** Flood elevation for the 200-yr design storm and proposed minimum opening elevation.
- (2) Stormwater management performance standards. Proposed design, suggested locationlocation and phased implementation of

effective, practicable stormwater management measures for plans shall be designed, engineered and implemented to achieve the following results:

- (a) Sediment control.
- 1. For new development, design practices to retain soil particles greater than 5 microns on the site (80% reduction) resulting from a one-year 24-hour storm eventdesign storm, (2.5 inches over 24-hour duration), according to approved procedures, and assuming no sediment resuspension;
- 2. For redevelopment resulting in exposed surface parking lots—and associated trafficdrive areas, design practices to retain soil particles greater than 20 microns on the entire siteon those areas (40% reduction) resulting from a one-year—24-hour storm—eventdesign storm, according to approved procedures, and assuming no sediment resuspension. Under no circumstances shall the site's existing sediment control level or trapping efficiency be reduced as a result of the-redevelopment.
- i. For redevelopment with proposed impervious surface area greater than 80% of existing, the first 0.5 inches of runoff must be captured using green infrastructure.
- (b) Oil and grease control. For all stormwater plans for commercial or industrial development, and all other uses where the potential for pollution by oil or grease, or both, exists, the first 0.5 inches of runoff will-must be treated using the best oil and grease removal technology available. This requirement may be waived by the plan reviewer only when the applicant can demonstrate that installation of such practices is not-unnecessary.
- (c) Runoff Curve Number. The maximum runoff curve number (RCN) used in such calculations shall be those shown in Table 1. The TR-55-specified curve numbers for other land uses shall be used. Heavily disturbed sites will be lowered one permeability class for hydrologic calculations. Lightly disturbed areas require no modification. Where practices have been implemented to restore soil structure to pre-developed conditions, no permeability class modification is required.

Table 1. Maximum Predevelopment Runoff Curve Numbers				
Runoff Curve Number	Hydrologic Soil Group*			
	A	₿	<u>C</u>	₽
Woodland	30	55	70	77

Grassland	<u>39</u>	<u>61</u>	71	78
Cropland	51	68	78	83

*When dual HSG are specified, the drained condition shall be assumed.

(cm)(c) __Runoff rate control __design standards. Except for redevelopment projects, all stormwater facilities shall be designed, installed and maintained to effectively accomplish the following:

- 1. For new development, design practices to 1.

 M_maintain pre_development peak runoff rates for the 1-year, 2, 10, 100, and 200-year, 24-hour storm eventdesign storms. (2.49 inches over 24-hour duration using the NRCS MSE4 storm distribution).
- 2. Maintain predevelopment peak runoff rates for the 2-year, 24-hour storm event (2.84 inches over 24-hour duration using the NRCS MSE4 storm distribution).
- 3. Maintain predevelopment peak runoff rates for the 10-year, 24-hour storm event (4.09 inches over 24-hour duration using the NRCS MSE4 storm distribution).
- 4. Maintain predevelopment peak runoff rates for the 100-year, 24-hour storm event (6.66 inches over 24-hour duration using the NRCS MSE4 storm distribution).
- 2. The maximum runoff curve number (RCN) used in such calculations shall be those shown in Table 1. The TR-55-specified curve numbers for other land uses shall be used. Heavily disturbed sites will be lowered one permeability class for hydrologic calculations. Lightly disturbed areas, or areas where practices have been implemented to restore soil structure to pre-developed conditions, require no modification.
- (d) Outlets. Provide stable outlet capable of carrying designed discharge flow as required in s. 14.51(2)(c), at a non-erosive velocity. Outlet design must consider flow capacity and flow duration. This requirement applies to both the site outlet and the ultimate outlet to stormwater conveyance or waterbody.

Table 1. Maximum Pre-development Runoff Curve Numbers				
Runoff Curve Number	Hydrologic Soil Group*			
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Woodland	<u>30</u>	<u>55</u>	<u>70</u>	<u>77</u>
Grassland	<u>39</u>	<u>61</u>	<u>71</u>	<u>78</u>
Cropland	<u>51</u>	<u>68</u>	<u>78</u>	<u>83</u>

*When dual HSG are specified, the drained condition shall be assumed.

- (d) Outlets. Discharges from new construction sites must have a stable outlet capable of carrying designed flow as required in sub. (2)(cm), at a non-crosive velocity. Outlet design must consider flow capacity and flow duration. This requirement applies to both the site outlet and the ultimate outlet to stormwater conveyance or waterbody.
- (e) Infiltration.
- 1. For both residential and nonresidential developmentsnew development, design practices to infiltrate sufficient runoff volume so that post-development infiltration volume shall be at least 90% of the pre-development infiltration volume, based upon average annual rainfall.
- 2. The maximum pre-development runoff curve number (RCN) used in such calculations shall be those as specified in 14.51(2)(c), Table 1.
- 3. If, when designing appropriate infiltration systems, more than two percent (2%) of the site is required to be used as effective infiltration area, the applicant may alternately design infiltration systems and pervious surfaces to meet or exceed the annual pre-development recharge rate. The annual pre-development recharge rate shall be determined from the Wisconsin Geological and Natural History Survey's 2009 report, *Groundwater Recharge in Dane County, Estimated by a GIS-Based Water-Balanced Model* or subsequent updates to this report, or by a site specific analysis using other appropriate techniques. If this alternative design

- approach is taken, at least two percent (2%) of the site must be used for infiltration.
- **4.** *Pre-treatment.* Before infiltrating runoff, pre-treatment 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 pre-treatment shall conform to the design standards in s. 14.53 and be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality.
- **5.** Prohibitions. Notwithstanding subparagraphs 1. through 3., iInfiltration systems may not be installed in any of the following areas:
- i. Areas associated with tier 1 industrial facilities identified in s. NR 216.21(2)(a), Wis. Admin. Code, including storage, loading, rooftop and parking.
- **ii.** Storage and loading areas of tier 2 industrial facilities identified in s. NR 216.21(2)(b), Wis. Admin. Code.
- iii. Fueling and vehicle maintenance areas.
- **iv.** Areas within 1,000 feet up gradient or within 100 feet down gradient of direct conduits to groundwater.
- v. Separation distances. Infiltration practices shall be located so that the characteristics of the soil and the separation distance between the bottom of the infiltration system and the elevation of seasonal high groundwater or the top of bedrock are in accordance with Table 2, below:

Table 2. Separation Distances and				
Soil Characteristics				
Source Area	Separation Distance	Soil Characteristics		
Industrial, Commercial, Institutional Parking Lots and Roads	5 Feet or More	Filtering Layer		
Residential Arterial Roads	5 Feet or More	Filtering Layer		
Roofs Draining to Subsurface Infiltration Practices	1 Foot or More	Native or Engineered Soil with Particles Finer than Coarse Sand		
Roofs Draining to Surface Infiltration Practices	Not Applicable	Not Applicable Page		
All Other	3 Feet	Filtering		

3 Feet

or More

Impervious

Source Areas

- vi. Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than five feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.
- vii. Areas within 400 feet of a community water system well as specified in s. NR 811.16(4), Wis. Admin. Code, for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.
- **viii.** Areas where contaminants of concern, as defined in s. NR 720.03(2), Wis. Admin. Code, are present in the soil through which infiltration will occur.
- **6.** Alternate use of runoff. 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 section.
- 7. *Minimizing* groundwater pollution. According to ch. NR 151, Wis. Admin. Code, infiltration systems designed in accordance with this section 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. Admin. Code. However, if site-specific information indicates that compliance with the preventive action limit is not achievable, the infiltration system may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.
- (f) Thermal control.
- -1. The stormwater management plan shall include provisions and practices to reduce the temperature of runoff for sites located within the watershed of a river or stream identified by the Wisconsin Department of Natural Resources as:
- 4-i. A Cold Water Community as identified through NR 102.04(3)(a), NR 104, Wisconsin Administrative Code, and Class I, Class II, and Class III Trout Streams identified in "Wisconsin Trout Streams," DNR publication PUB-FH-806-2002 or its successor.
- 2.ii. Rivers or streams proposed by the Wisconsin Department of Natural Resources as Cold Water Communities and Class I, II, and III Trout Streams.
- (g) Thermal control; continued. 2. The stormwater management plan does not have to meet the requirement in sub. (2)(f) if the applicant can justify by use of a model approved by the Dane

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Filtering

Layer

County Conservationist that practices are not necessary because the temperature increase of runoff from the site post-development will be zero.

- (h) Thermal control; continued. 3. A current list and maps of affected watersheds shall be available for reference at the office of the local approval authority and the plan review agency.
- (3) Stormwater management goals. The following standards shall be met whenever possible, and proposed design, suggested location and implementation of practices to meet these goals shall be included in plans:
- (a) For existing development, design practices to retain soil particles greater than 40 microns on the site (20% reduction) resulting from a one-year, 24-hour storm eventdesign storm, according to approved procedures, and assuming no sediment resuspension.
- **(b)** For street reconstruction, design practices to retain soil particles greater than 20 microns on the site (40% reduction) resulting from a one-year, 24-hour storm eventdesign storm, according to approved procedures, and assuming no sediment resuspension.
- (4) Closed Watersheds. Pre-development modeling must include closed watersheds areas. Sites within closed watersheds must be designed to achieve 90% Stay-on without exemption. Sites with areas subject to inundation (ground elevations below the watershed outlet elevation) must include:
- (a) a stable outlet capable of handling overflow events.
- (b) an emergency drawdown or pumping plan. (c) storage capacity for back-to-back 100-yr storm events.

[History: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (2)(a), (2)(c), (2)(cm), (2)(e) and (2)(f) am., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (2)(e)1. and 2. am., Sub. 1 to OA 4, 2006-07, pub. 08/31/06; (2)(c) and (2)(e)3. am., OA 39, 2008-09, pub. 06/08/09; (2)(e)1. and 2. am., 3. through 6. renum. as 4. through 7., OA 33, 2010-11, pub. 03/15/11; (2)(c), (cm), and (e) am., OA 5, 2013-14, pub. 07/02/13; (2)(cm) am., 2015 OA-02, pub. 07/10/15.]

- **14.52 OFF-SITE STORMWATER MANAGE-MENT. (1)** The local authority may establish off-site stormwater management and associated fees, provided that provisions are made to manage stormwater by an off-site facility, and provided that all of the following conditions for the off-site facility are met:
- (a) The facility is in place;

- **(b)** The facility is designed and adequately sized to provide a level of stormwater control that at least meets the ordinance standards.
- **(c)** The local approval authority is satisfied that the facility has a legally obligated entity responsible for its long-term operation and maintenance.
- (2) A municipality adopting and administering an ordinance pursuant to sec. 14.44(3) that establishes off-site stormwater management shall adopt the standards for off-site stormwater management set forth in this ordinance.

[History: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]

- **14.53 TECHNICAL STANDARDS AND SPE- CIFICATIONS.** The design of all best management practices designed to meet the requirements of this <u>subchapter chapter</u> shall comply with the following technical standards:
- (1) Natural Resources Conservation Service's "Wisconsin Field Office Technical Guide, Chapter 4" or its successor;
- (2) Applicable construction or erosion control standards by the Wisconsin Department of Natural Resources;
- (3) Any other technical methodology approved by the Dane County ConservationistDane County Land and Water Resources Department.[History: cr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (1) and (2) am., Sub. 1 to OA 2, 2005-06, pub. 11/30/05.] [History: (14.54) am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; 14.54 comb. w/14.545 and renum. as 14.50 and, as renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]

[**History**: (14.545) cr., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; 14.545 comb. w/14.54 and renum. as 14.50 and, as renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]

[History: 14.57 cr., Sub. 2 to OA 10, 1987-88, pub. 09/14/87; am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; renum. from 14.57 to 14.54 and as renum., am., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; 14.54 rep., Sub. 1 to OA 2, 2005-06, pub. 11/30/05.]

[14.54 reserved.]

- **14.55 PERMIT FEES. (1)** The local approval authority may establish a fee schedule for erosion control and stormwater management permits.
- (2) (a) For areas under Dane County jurisdiction according to s. 14.44(2) and s. 14.44 (3)(c) and (d), the erosion control and stormwater management permit fee shall be a \$100 base fee for projects eligible for a simplified checklist under s. 14.50(2). The base fee for other projects subject to the erosion control

requirements of s. 14.45 shall be \$200, and the base fee for projects subject to the stormwater management requirements of s. 14.46 shall be \$400.

- **(b)** *Permit Revisions.* The fee for significant permit revisions shall be the base fee.
- **(b)** Late filing fee. When an applicant or landowner begins work requiring a permit before obtaining the permit or appropriate approvals, the fee shall be doubled.
- **(c)** Expired permit fee. When an applicant or landowner fails to stabilize the site according to the approved permit conditions, an after-the-fact permit is required, and applicable fees shall be doubled.
- (3) The fee for preliminary review letters shall be \$50.
- (a) If a preliminary approval letter has been obtained, the erosion control and stormwater management base fee shall be reduced by \$50.
- (4) For sites required to obtain an erosion control permit under s. 14.45, there shall be an additional fee of \$.006 per square foot of disturbed area.
- (5) For sites required to obtain a stormwater control permit under s. 14.46, there shall be an additional fee of \$.015 per square foot of new or redeveloped impervious area.
- (7) Municipal street and road maintenance projects are exempt from fees required in this section.

[History: am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; rep. and recr., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; (6) cr., Sub. 1 to OA 10, 2001-02, pub. 01/07/02, eff. 08/22/02; (2) and (3) am. and (7) cr., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (2), (4) and (5) am., OA 30, 2008-09, pub. 11/26/08, eff. 01/01/09; (2)(a) am., OA 39, 2008-09, pub. 06/08/09; (6) resc., Sub. 1 to OA 23, 2010-11, pub. 12/02/10; (2)(c) cr., OA 5, 2013-14, pub. 07/02/13; (4) and (5) am., 2016 OA-46, pub. 11/25/16.]

[History: 14.56(1)–(7) am. and (8)–(12) cr., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; (12) am., OA 11, 1996-97, pub. 08/23/96; 14.56 rep., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]

[**History**: 14.60 cr., Sub. 2 to OA 3, 1994-95, pub. 09/30/94, eff. 01/01/95; (8) am., OA 11, 1996-97, pub. 08/23/96; (1) am., OA 49, 1996-97, pub. 07/18/97; 14.60 rep., Sub. 1 to OA 2, 2005-06, pub. 11/30/05.]

[14.56 - 14.70 reserved.]

14.71 APPEALS. (1) County jurisdiction.

(a) Any person aggrieved by any decision of the director pursuant to this ordinance may appeal to the Dane County Land Conservation Committee (hereinafter "committee"). Such appeal shall be taken within 30 days after the challenged

- decision. Notice of Appeal setting forth the specific grounds for the appeal shall be filed with the director and the committee. The director shall forthwith transmit to the committee the record upon which the action appealed from was taken.
- **(b)** The committee shall fix a reasonable time for the hearing of the appeal and publish a class 2 notice thereof under ch. 985, Wis. Stats., as well as give due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing any party may appear in person or by agent or attorney.
- **(c)** The committee may, in conformity with the provisions of this ordinance, reverse or affirm, wholly or partly, or modify the order, requirement, decision or determination appealed from and may make such order, requirement, decision or determination as ought to be made, and shall have all the powers of the officer from whom the appeal is taken.
- **(d)** The concurring vote of a majority of the committee shall be necessary to reverse the decision of the director.
- **(2)** Municipal jurisdiction. A municipality adopting and administering an ordinance pursuant to s. 14.44(3), shall be governed by the appeals process described in s. 62.23(7)(e), Wis. Stats.

[**History**: 14.71 am., OA 49, 1996-97, pub. 07/18/97; 14.71 rep. and recr., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; (1) am., OA 23, 2006-07, pub. 12/29/06.]

- **14.72 VARIANCES.** (1) An applicant may include in the application a request for a variance from the requirements of sec. 14.50 or 14.51. No variance shall be granted unless applicant demonstrates and the director and the county conservationist find that all of the following conditions are present:
- (a) Enforcement of the standards set forth in this ordinance will result in unnecessary hardship to the landowner:
- **(b)** The hardship is due to exceptional physical conditions unique to the property; and
- **(c)** Granting the variance will not adversely affect the public health, safety or welfare, nor be contrary to the spirit, purpose and intent of this ordinance.
- (2) If all of the conditions set forth in sub. (1) are met, a variance may only be granted to the minimum extent necessary to afford relief from unnecessary hardship, with primary consideration to water quality and impact to downstream conditions.

- **(3)** A person aggrieved by a variance determination by the director may appeal that decision to the committee pursuant to s. 14.71.
- **(4)** A person aggrieved by a decision of the committee regarding a variance may appeal that decision to the board of adjustment pursuant to s. 10.26.

[**History:** 14.72 rep. and recr., Sub. 1 to OA 2, 2005-06, pub. 11/30/05; am., OA 23, 2006-07, pub. 12/29/06.]

14.73 VIOLATIONS AND ENFORCEMENT. (1) Stop work order. (a) Whenever the local approval authority finds any noncompliance with the provisions of this ordinance, the local approval authority shall attempt to communicate with the owner or person performing the work to obtain immediate and voluntary compliance if such person is readily available. If the owner or person performing the work is not readily available, that person refuses to voluntarily comply immediately or the noncompliance presents an immediate danger or will cause or threatens to cause bodily injury or damage to offsite property including, but not limited to, off-site runoff, the local approval authority shall post in a conspicuous place on the premises, a stop work order which shall cause all activity not necessary to correct the noncompliance to cease until noncompliance is corrected.

- **(b)** The stop work order shall provide the following information:
- date of issuance;
- **2.** town and section number or equivalent information within a municipality;
- reason for posting; and
- **4.** signature of inspector posting the order.
- **(c)** Unauthorized removal of a stop work order from the premises shall be a violation of this ordinance.
- (2) In addition to posting a stop work order, the local approval authority shall provide notification to the owner or contractor by personal service, written notice by certified mail, electronic mail, or facsimile transmission.
- (a) The permittee, landowner and contractor shall have 24 hours from time of notification by the local approval authority to correct any noncompliance with the plan when notification is by either personal communication of noncompliance to the owner or contractor or their respective agents, or written notice sent by certified mail to owner or contractor.
- **(b)** If notice is not provided under sub. (2)(a), the permittee and landowner shall have 72 hours to correct any noncompliance with the plan when notification is by posting notice in a conspicuous

place on the site or sending notice by facsimile transmission to the owner or contractor.

- (3) If the noncompliance is not corrected within the time periods specified in sub. (2)(a) or (b), the permittee and landowner authorize the local approval authority to take any action, to perform any work, or commence any operations necessary to correct noncompliance on the subject property where notice of noncompliance has been issued to bring the property into conformance with plan requirements. permittee and landowner further consent to reimburse the authority for the total costs and expenses of the corrective Reimbursement may be collected as a special charge upon the property for current services rendered as provided by law.
- (4) If the permittee has filed an appeal under s. 14.71(1)(a) prior to the expiration of the time for compliance under sub. (2)(a) or (b), the local approval authority may take action, perform work or correct conditions only to the extent necessary to protect against an imminent hazard or condition that will cause or threatens to cause personal injury or damage to off-site property. [History: 14.73 am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; 14.73 rep. and recr., Sub. 1 to OA 2, 2005-06, pub. 11/30/05.]

[14.74 - 14.80 reserved.]

- 14.81 PENALTIES. (1) Any person, firm, company or corporation who violates or refuses to comply with the provisions of this ordinance shall be subject to a forfeiture of not less than \$200 nor more than \$1,000 and the costs of prosecution. Each day that a violation exists shall constitute a separate offense.
- (2) Any person who has the ability to pay any forfeiture entered against him or her under this ordinance, but refuses to do so, may be confined in the county jail until such forfeiture is paid, but in no event to exceed thirty days. In determining whether an individual has the ability to pay a forfeiture, all items of income and all assets may be considered regardless of whether or not such income or assets are subject to garnishment, lien, or attachment by creditors.
- (3) The corporation counsel is authorized to seek enforcement of any part of this ordinance by court action seeking injunctive relief. It shall not be necessary for the county to seek other remedies before seeking injunctive relief.

[History: 14.81 am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; (2) rep., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02; am., Sub. 1 to OA 13, 2004-05, pub. 05/19/05; 14.81 rep. and recr., Sub. 1 to OA 2, 2005-06, pub. 11/30/05.]

[**History**: 14.82 am., Sub. 4 to OA 27, 1993-94, pub. 09/30/94, eff. 01/01/95; 14.82 rep., OA 2, 2001-02, pub. 08/22/01, eff. 08/22/02.]

[14.82- 14.96 reserved.]

14.97 INTERPRETATION. In their interpretation and application, the provisions of this ordinance shall be held to be minimum requirements and shall be liberally construed in favor of Dane County, and shall not be deemed a limitation or repeal of any other power granted by the Wisconsin Statutes.

14.98 SEVERABILITY CLAUSE. If any section, provision or portion of this ordinance is ruled invalid by a court, the remainder of the ordinance shall not for that reason be rendered ineffective.

[14.99 reserved.]

[**History:** 14.99 rep., Sub. 1 to OA 2, 2005-06, pub. 11/30/05.]

END OF CHAPTER