STATE OF WISCONSIN
MILWAUKEE AND OZAUKEE COUNTIES
VILLAGE OF BAYSIDE

ORDINANCE NO. 23-742

An Ordinance to Repeal and Recreate Sections 104-46 through 107-58 of the Municipal Code with Regard to Stormwater Management

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The Village Board of the Village of Bayside, Milwaukee and Ozaukee Counties, Wisconsin does ordain as follows:

Section One: Sections 104-46 through 107-58 of the Municipal Code are hereby repealed and recreated to read as follows:

ARTICLE III. STORMWATER MANAGEMENT

Sec. 107-46. Purpose, intent, and findings of fact of article.

(a) *Purpose.* The general purpose of this article is to set forth stormwater requirements and criteria that will diminish the threats to neighboring properties, public health, safety, welfare, new and existing property and structures, and the aquatic environment due to runoff of stormwater from land development activity. Specific purposes are to:

(1) Further the maintenance of safe and healthful conditions by protecting the quality of the waters of the state and the village;

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

(3) Ensure the safe capacity of existing drainage facilities and receiving water bodies;

(4) Prevent undue channel erosion; control increases in the scouring and transportation of particulate matter;

(5) Prevent conditions that endanger downstream property;

(6) Control building sites, placement of structures, and land uses, and promote sound economic growth; and

(7) Promote cost-effective maintenance of current stormwater infrastructure such as ditching, culverts, and ponds.

(b) *Intent.* The intent of this article is to manage the long-term, post-construction stormwater discharges from land development activities, and to define appropriate measures for maintenance of existing watercourses. Where stormwater management system plans have been developed and approved by the village, it is the intent that all land development activities will include stormwater management measures that meet performance standards set forth in those approved plans. Where such stormwater management system plans have not been developed or approved, it is the intent of the village that the stormwater management standards set forth be applied unless otherwise excepted by the village manager and the village engineer.

(c) *Findings of fact.* This article is based on the finding that uncontrolled stormwater runoff from land development activity has a significant impact upon water resources and the health, safety and general welfare of the community, and diminishes the public enjoyment and use of natural resources. Specifically, uncontrolled stormwater runoff can:

(1) Degrade physical stream habitat by increasing stream bank erosion, increasing stream bed scour, diminishing groundwater recharge, and diminishing stream base flows;

(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 or significantly impact public health, safety, property, and general welfare by overtaxing existing stormwater infrastructure such as storm sewers, drainage ways, and other minor drainage facilities;

(6) Threaten or significantly impact 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; and

(8) Aggravate excessive infiltration and inflow of water into sanitary sewer connections during peak storm events causing the conveyance system to surcharge, overflow or backup into basements.

(Ord. No. 09-600, § 1(1), 8-6-2009)

Sec. 107-47. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Agricultural activity means the planting, growing, cultivating, and harvesting of crops; growing and tending of gardens, and trees; harvesting of trees.

Agricultural land use means the use of land for planting, growing, cultivating and harvesting of crops for human or livestock consumption and pasturing or yarding of livestock.

Best management practice (BMP) means a structural or non-structural measure, practice, technique or device employed to avoid or minimize sediment or pollutants carried in runoff to waters of the state; or manage the rate or volume of runoff.

Cease and desist order means a court issued order to halt land developing activity that is being conducted without the required permit.

Common plan of development or sale means all lands included within the boundary of a certified survey or subdivision plat created for the purpose of development or sale of property where multiple separate and distinct land developing activity may take place at different times and on different schedules.

Design storm means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency, and total rainfall depth.

Discharge volume means the quantity of runoff discharged from the land surface as the result of a rainfall event.

Fee in lieu means a payment of money to the village in place of meeting all or part of the stormwater performance standards required by this article.

Financial guarantee means a performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the village by the permit holder to assure that requirements of this section are carried out in compliance with the stormwater management plan.

Gross aggregate area means the total area, in acres, of all land located within the property boundary containing the land development activity.

Groundwater enforcement standard means a numerical value expressing the concentration of a substance in groundwater, which is adopted under Wis. Stats. § 160.07 and Wis. Admin. Code § NR 140.10 or Wis. Stats. § 160.09 and Wis. Admin. Code § NR 140.12.

Groundwater preventive action limit means a numerical value expressing the concentration of a substance in groundwater which is adopted under Wis. Stats. § 160.15 and Wis. Admin. Code § NR 140.10, 140.12, or 140.20.

Illicit discharge means any discharge to a municipal separate stormwater system that is not composed entirely of stormwater, except discharges authorized by a WPDES permit or other discharge not requiring a WDPES permit such as landscape irrigation, individual residential car washing, firefighting, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, flows from riparian habitats and wetlands, and similar discharges.

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.

Infill area means an undeveloped area of land located within existing development.

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

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.

Karst feature means an area or surficial 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, seeps or swallets.

Land development activity means any construction or re-development of buildings, roads, parking lots, paved and unpaved storage areas, and similar facilities, but not including agricultural activity.

Land disturbing construction activity means any manmade alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of sediment into waters of the state. Land disturbing construction activity includes clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities.

Land user means any person operating, leasing, renting or having made other arrangements with the landowner by which the landowner authorizes use of his land.

Landowner means any person holding title to or having an interest in land.

Maintenance agreement means a legal document that is filed with the Milwaukee County Register of Deeds, or the Ozaukee County Register of Deeds, as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

MEP or *maximum extent practicable* means a level of implementing best management practices in order to achieve a performance standard specified in this article 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 the performance standards and may vary based on the performance standard and site conditions.

Non-storm discharge means a discharge to the storm sewer system created by process other than stormwater runoff.

Non-structural measure means a practice, technique, or measure to reduce the volume, peak flow rate, or pollutants in stormwater that does not require the design or installation of fixed stormwater management facilities.

Off-site means located outside the property boundary described in the permit application for land development activity.

On-site means located within the property boundary described in the permit for the land development activity.

Ordinary high-water mark has the meaning given in Wis. Admin. Code § NR 115.03(6).

Other than residential development means development of the following land uses: commercial; industrial; government and institutional; recreation; transportation, communication, and utilities.

Outstanding resource waters means waters listed in Wis. Admin. Code § NR 102.10.

Peak flow discharge rate means the maximum rate at which a unit volume of stormwater is discharged.

Percent fines means the percentage of a given sample of soil, which passes through a # 200 sieve.

Performance standard means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

Pervious surface means a surface that infiltrates rainfall during a large portion of the design rainfall event. Well-managed lawns, parks, fields, woodlands, or other vegetated areas are examples of surfaces that are typically pervious.

Pollutant has the meaning given in Wis. Stats. § 283.01(13).

Pollution has the meaning given in Wis. Stats. § 283.01(14).

Post-construction site means a construction site following the completion of land disturbing construction activity and final site stabilization.

Post-construction stormwater discharge means any stormwater discharged from a site following the completion of land disturbing construction activity and final site stabilization.

Post-development condition means the extent and distribution of land cover types, anticipated to occur under conditions of full development that will influence stormwater runoff and infiltration.

Pre-development condition means the extent and distribution of land cover types present before the initiation of land development activity, assuming that all land uses prior to development activity are managed in an environmentally sound manner.

Pre-treatment means the treatment of stormwater prior to its discharge to the primary stormwater treatment practice in order to reduce pollutant loads to a level compatible with the capability of the primary practice.

Preventive action limit has the meaning given in Wis. Admin. Code § NR 140.05(17).

Recreational trail means a path that is distinctly set apart from a roadway, street, or sidewalk; designed for activities such as jogging, walking, hiking, bird-watching, bicycle riding, roller skating, or similar recreational activities not involving the use of motorized vehicles; and not a sidewalk according to Wis. Stats. § 340.01(58).

Redevelopment means new construction, modification or replacement of older development.

Regional flood means the peak flow and peak elevation of water with a one percent probability of occurring during any one year, considering rainfall time and intensity patterns, rainfall duration, area distribution, antecedent moisture, and snow melt. The common misnomer, "100-year flood or floodplain" implies a temporal element rather than a one in 100 random probability of the event.

Residential development means that which is created to house people, including the residential dwellings as well as all attendant portions of the development including lawns, driveways, sidewalks, garages, and access streets. Residential development includes single-family dwellings, multifamily dwellings, apartments, and trailer parks.

Runoff or *stormwater runoff* means stormwater or precipitation including rain, snow or ice melt or similar water that moves on the land surface via sheet or channelized flow.

Site means the entire area included in the legal description of the land on which the land disturbing construction activity occurred.

Site restriction means any physical characteristic which limits the use of a stormwater best management practice as prescribed in the technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V.

Stop-work order means an order issued by the building inspector that all construction activity on the site be stopped.

Stormwater management plan means a document that identifies what actions will be taken to reduce stormwater quantity and pollutant loads from land development activity to levels meeting the purpose and intent of this article.

Stormwater management system plan is a comprehensive plan developed to address stormwater drainage and nonpoint source pollution control problems on a watershed or sub-watershed basis, and which meets the purpose and intent of this article.

Structural measure means source area practices, conveyance measures, and end-of-pipe treatment that are designed to control stormwater runoff pollutant loads, discharge volumes, and peak flow discharge rates.

Surface water means a navigable body of water as that term is defined in Wis. Stats. § 281.31(2)(d), as amended from time to time.

Technical standard means a document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.

Time of concentration means the time period for the furthest runoff from the outlet of a watershed to contribute to flow at the watershed outlet.

Top of the channel means an edge, or point on the landscape, landward from the ordinary high-water mark of a surface water of the state, where the slope of the land begins to be less than 12 percent continually for at least 50 feet. If the slope of the land is 12 percent or less continually for the initial 50 feet, landward from the ordinary high-water mark, the top of the channel is the ordinary high-water mark.

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.

Type II distribution means a rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published 1973." The type II curve is applicable to all of the state and represents the most intense storm pattern.

Village personnel or *authorized personnel* means employees of the village or those agents authorized by the village board to implement these stormwater management regulations.

Water quality management means the stormwater standards and duties established under the Clean Water Act, 33 USC 1251 et seq., parallel state law regulating the discharge of pollutants, and implementing regulations.

Water quantity management means stormwater duties and practices to abate peaks flood flows during regional storm events pursuant to chapter 13 of the Milwaukee Metropolitan Sewerage District rules as implemented and enforced by this municipality.

Watercourse means a natural or artificial channel through which water flows.

Waters of the state has the meaning given in Wis. Stats. § 281.01(18). The term "waters of the state" generally refers to those portions of Lake Michigan and Lake Superior within the boundaries of the state, and 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.

Working day means a calendar day, except Saturdays, Sundays, and village recognized legal holidays.

(Ord. No. 09-600, § 1(2), 8-6-2009)

Sec. 107-48. Stormwater management plan and facilities required.

No person shall proceed with any residential, commercial, industrial, or institutional land development, redevelopment or additions of impervious surface to existing facilities of 100 square feet or more, without providing appropriate stormwater management facilities that adequately control stormwater runoff from such development or subdivided property. A site-specific stormwater management plan must be submitted and approved by the village before any required new stormwater management facilities are constructed, unless exempted or waived pursuant to the provisions of this article. An approved site-specific stormwater management plan is also required before an existing drainage system is relocated, deepened, widened, enlarged, filled, obstructed, or otherwise altered in preparation for land development or redevelopment activity, or land disturbing construction activity. The plan must be submitted and approved before any land development, land disturbing construction activity or watercourse maintenance activity is commenced, or a land subdivision plat or village certified survey map is approved and recorded.

(Ord. No. 09-600, § 1(3), 8-6-2009)

Sec. 107-49. Applicability.

(a) *Applicability.* This article applies as set forth below to land development or maintenance activities that meet applicability criteria specified in this section. This section also applies as set forth below to land development activities that are smaller than the minimum applicability criteria if such activities are part of a larger common plan of development or sale that meets any of the following applicability criteria, even through multiple separate and distinct land development activities may take place at different times on different schedules:

(1) Land development activity shall be subject to discharge quantity standards, as set forth in section 107-50(a) through (c). Applicability requirements listed in the current publication of Chapter 13 Surface Water and Stormwater of the Milwaukee Metropolitan Sewerage District Rules.

(2) Both discharge quantity and quality standards as set forth in section 107-50(a) through (d) shall apply to any land development activity which disturbs one or more acres (43,560 square feet) regardless of the amount of additional impervious surface created.

(3) For phased developments, the cumulative effect of all phases shall be considered. Discharge quantity standards will apply if the cumulative amount of new impervious surface is one-half acres (21,780 square feet) or more, even if the individual components of a development each create less than one-half acre of impervious surface; both discharge quantity and quality standards will apply if the cumulative amount of land development activity disturbs one or more acres (43,560 square feet), even if the individual components of a development each disturb less than one acre of land.

(4) Land development activity of any size that, in the opinion of the village manager and the village engineer, is likely to result in stormwater runoff which exceeds the safe capacity of existing drainage facilities, storage facilities, or receiving surface waters, which may cause surcharging and increase flooding risks, which causes undue channel erosion, unreasonably increases surface water pollution by scouring or the transportation of particulate matter, or endangers downstream property on a surface water shall be subject to section 107-50(a) through (d).

(5) In all cases, land development activity shall be subject to the impervious surface requirements of sections 104-98 and 125-3.

(b) *Jurisdiction.* This article applies to all lands and waters, and all land development activities within boundaries of the village.

(c) *Comity.* State agencies should design and incorporate best management practices for surface water quality and stormwater quantity management for new impervious surfaces. The runoff management techniques should be

the same as flood abatement plans and techniques utilized by local governments in the watershed. The lead agency preparing an environmental assessment for a federal or state project shall identify the mitigating runoff management techniques to prevent increases in peak flood flows from new impervious areas.

(d) *Exemptions from discharge quantity requirements.* The following activities are exempt from discharge quantity requirements:

(1) Exemptions from discharge quantity requirements listed in the current publication of Chapter 13 Surface Water and Stormwater of the Milwaukee Metropolitan Sewerage District Rules.

(2) Residential infill where the lot is five acres or less, the development is exclusively residential, the net increase in the area of impervious surface is less than 20 percent of the area of the site, and each boundary of the site is contiguous to sites that contain earlier development served by sanitary sewers, streets, or public water supply when the governmental unit receives the plans for the new development or parkland; or other public land, a utility right-of-way, or a watercourse;

(3) Development or redevelopment activity where the area of impervious surface after development will be 100 square feet or less of the total area of the site;

(4) Development activity located in sites riparian to Lake Michigan where:

a. Site runoff is directly discharged into Lake Michigan; and

b. The public works department has determined that bluff erosion protection has been appropriately provided;

(5) Construction of recreational trails if the trail width is ten feet or less, and the trail has a continuous buffer at least five feet wide on each side, disregarding interruption by streets, driveways, or other impervious surfaces crossing the trail.

(e) *Exemptions from discharge quality requirements.* The following activities are exempt from discharge quality requirements:

(1) A redevelopment post-construction site with no increase in exposed parking lots or roads.

(2) A post-construction site with less than ten percent connected imperviousness based on complete development of the post-construction site, provided the cumulative area of all parking lots and rooftops is less than one acre.

(3) Nonpoint discharges from agricultural facilities and practices.

(4) Nonpoint discharges from silviculture activities.

(5) Routine maintenance for project sites under five acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.

(6) Underground utility construction such as water, sewer and fiber optic lines. This exemption does not apply to the construction of any above-ground structures associated with utility construction.

(f) *Exemptions from discharge quantity and quality requirements.* The following activities are exempt from both discharge quantity and quality requirements:

(1) Development approved by the village before the effective date of the ordinance from which this article derives, provided that the approval had sufficient finality to create a vested right to proceed with the development;

(2) Maintenance, alteration, use or improvement to an existing structure or construction activity which does not significantly change or affect the water quality, hydrologic and hydraulic characteristics of the surface water discharge;

(3) Maintenance activities undertaken by any municipal, state or federal governmental agency;

(4) Facilities, or portions thereof, for which a special exception is granted pursuant to section 125-9.

(Ord. No. 09-600, § 1(4), 8-6-2009)

Sec. 107-50. Stormwater management standards.

(a) *Stormwater management criteria.*

(1) The site-specific stormwater management system plan required under the provisions of this article shall be designed in accordance with good engineering practice. The specific methods to be used in the calculation of peak rates of discharge, volumes, and water quality conditions and of the hydraulic capacities of storage and conveyance facilities shall be left to the judgment of the professional engineer preparing the plan subject, however, to the approval of the village.

(2) The site-specific stormwater management system plan shall be designed such that natural topography and land cover features such as swales, natural streams, channels, drainage ways, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used to the extent practicable.

(b) *Stormwater discharge quantity standards.*

(1) Peak flow sharing components of stormwater structures shall be designed in accordance with standard engineering practices.

(2) Runoff volumes and peak flow rates used in designing the water quantity components of stormwater structures shall be based on the principles of the document entitled "Urban Hydrology for Small Watersheds" (Technical Release 55: Engineering Division, Soil Conservation Service, United States Department of Agriculture, June 1992).

(3) Atlas 14 precipitation depths, and the appropriate NRCS Wisconsin MSE3 precipitation distribution shall be the basis for the analyses required by this article.

(4) The conveyance and storage facilities incorporated into the site-specific stormwater management system plan required under this section shall be designed as an integral part of complementary minor and major subsystem.

(5) The minor subsystem, generally consisting of the proposed on-site stormwater conveyance facilities such as storm sewers and storm drains, shall be designed to avoid nuisance flooding of streets and yards and shall accommodate the peak rate of runoff from rainfall events up to and including the ten-year recurrence interval event. The rainfall intensity shall be determined based on appropriate times of concentration from relationships established and published by the Southeastern Wisconsin Regional Planning Commission.

(6) The complementary major subsystem shall consist of the public streets and interconnected flow paths to the streets and from the streets to receiving streams and watercourses. The major system shall be designed to accommodate peak rates of discharge from rainfall events up to and including the 100-year recurrence interval event without inundation of exposed basements, building basement window wells, basement entryways, or the first floors of buildings, utilizing a one-foot freeboard.

(7) Unless otherwise provided for, all land development activities subject to this section shall establish on-site management practices to control the peak flow rates of stormwater discharged from the site. On-site management practices shall be used to meet the minimum performance standards as set forth in this section.

(c) *Peak flow discharge.*

(1) The peak flow discharge rates of stormwater runoff under the post-development conditions shall be controlled and reduced per the current publication of Chapter 13 Surface Water and Stormwater of the Milwaukee Metropolitan Sewerage District Rules.

(2) If the land development site or the proposed stormwater management facility currently receives or is proposed to receive surface runoff originating from off-site tributary watershed areas, the stormwater management criteria shall apply to the total runoff that originates from the land being developed and tributary off-sites areas.

(3) Any stormwater management pond shall fully contain the runoff from the tributary watershed area during the 100-year, 24-hour rainfall with a MSE3 distribution under the post-development conditions. The tributary watershed area consists of all on-site and off-site areas draining to the pond.

(4) Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.

(5) If surface runoff leaves the site at more than one location, discharge at each location must individually meet the standards set forth in this section. The discharge comparisons shall be made at stormwater conveyance facilities (i.e., ditches, culverts, storm sewers, stormwater detention ponds, channels, streams, etc.) that are located immediately downstream of each discharge location of the land development site.

(6) Impacts to the hydraulic performance of downstream conveyance or storage facilities shall be avoided. Where such changes are proposed, the impact of the proposal on existing stormwater detention ponds shall be assessed using a methodology authorized by the village and in accordance with existing BMPs.

(7) All stormwater runoff conveyance facilities within the boundaries of the property that is being developed shall be sized to adequately carry the runoff from a ten-year recurrence interval rainfall. In some cases, less sophisticated computation methods such as the rational method may be used with prior written approval by the village manager and the village engineer.

(8) For storms exceeding the design capacity of the conveyance system, overland drainage routes shall direct the excess runoff to any stormwater management pond proposed for the site.

(9) When the Soil Conservation Service TR-55 Method is used to calculate peak flow discharge rates and runoff volumes for the pre-development condition, NRCS curve numbers in the following table shall be used. When other methods for computing runoff are used, they shall assume comparable runoff conditions.

Maximum Pre-Development Runoff Curve Numbers				
Runoff Curve Number	**Hydrologic Soil Group**			
	A	B	C	D
Woodland	30	55	70	77
Grassland	39	61	71	78
Cropland	55	69	78	83

(d) *Stormwater discharge quality standards.* Unless otherwise provided, all land development activities subject to this article shall establish on-site management practices to control the quality of stormwater discharged from the site. On-site management practices shall be used to meet the following minimum standards:

(1) Technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V.

(2) Where technical standards have not been identified or developed by the state department of natural resources, other technical standards may be used, provided that the methods have been approved by the village manager and the village engineer.

(3) The most recent rainfall data per Atlas 14 precipitation depths, and the appropriate NRCS Wisconsin MSE3 precipitation distribution.

(4) Stormwater discharges shall be treated to remove, on an average annual basis, a minimum of 80 percent of the total suspended solids load. To achieve this level of control, stormwater practices shall be designed in accordance with the methods set forth in the latest edition of the technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V, and amended from time to time by the state department of natural resources.

(5) For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80 percent, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80 percent total suspended solids reduction to meet the requirements of this subsection.

(6) For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40 percent, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40 percent total suspended solids reduction to meet the requirements of this subsection.

(7) For in-fill development of less than five acres that occurs within ten years after the effective date of this rule, by design, reduce to the maximum extent practicable, the total suspended solids load by 40 percent, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40 percent total suspended solids reduction to meet the requirements of this subsection.

(8) For in-fill development that occurs ten or more years after the effective date of this rule, by design, reduce to the maximum extent practicable, the total suspended solids load by 80 percent, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80 percent total suspended solids reduction to meet the requirements of this subsection.

(9) Notwithstanding sections 107-51 through 107-53 and this section, if the design cannot achieve the applicable total suspended solids reduction specified, the stormwater management plan shall include a written and site-specific explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.

(10) The proposed stormwater quality improvement and pollution reduction measures may include wet detention/retention ponds, infiltration devices, filter strips, grass swales, oil-grit separator devices, or a combination of structural best management practices recognized and endorsed by the technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V, as published and amended from time to time by the state department of natural resources.

(11) The proposed stormwater quality improvement and pollution reduction measures may also include good housekeeping and/or source area best management practices including impervious area sweeping, catchbasin cleaning or other methods as approved by the village manager and the village engineer.

(12) All on-site storm sewer inlets on private properties shall consist of catchbasins with a sump depth of a minimum of two feet. The cleaning of such on-site sumps through a vacuum device and the proper disposal of the contents shall be included as part of the maintenance agreement required as part of this section.

(13) If stormwater quality ponds are proposed, these shall be designed and constructed in accordance with the technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V, as published and amended from time to time by the state department of natural resources.

(14) Runoff within a non-navigable drainage way that flows into a BMP, such as a wet pond, is not required to meet water quality performance standards unless designed to provide treatment.

(15) The discharge of runoff from a BMP, such as a wet pond, or after a series of such BMPs is subject to this article.

(16) If infiltration practices are proposed, runoff shall be pre-treated prior to infiltration when required to prolong maintenance of the infiltration practice and to prevent discharge of stormwater pollutants at concentrations that will result in exceedances of groundwater preventive action limits or enforcement standards established by the department of natural resources in Wis. Admin. Code § NR 140, as amended from time to time. Stormwater shall not be injected underground through excavations or openings that would violate Wis. Admin. Code § NR 812.05, as amended from time to time.

(e) *Fueling and vehicle maintenance areas.* Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have best management practices designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

(f) *Infiltration.* BMPs shall be designed, installed, and maintained to infiltrate runoff to the maximum extent practicable in accordance with the following, except as provided in sections 107-49, 107-51, and this section:

(1) For residential developments, one of the following shall be met:

a. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the project site is required as an effective infiltration area.

b. Infiltrate 25 percent of the post-development runoff from the two-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the project site is required as an effective infiltration area.

(2) For nonresidential development, including commercial, industrial and institutional development, one of the following shall be met:

a. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than two percent of the project site is required as an effective infiltration area.

b. Infiltrate ten percent of the runoff from the two-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than two percent of the project site is required as an effective infiltration area.

(3) 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 mainta in compliance with the preventive action limit at a point of standards application in accordance with Wis. Admin. Code ch. NR 140. 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.

(4) 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 in accordance with section 107-48. Pretreatment options

may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

(5) Notwithstanding section 107-48, the discharge from BMPs shall remain below the enforcement standard at the point of standards application.

(g) *Infiltration exclusions.* The runoff from the following areas is prohibited from meeting the requirements of this section:

(1) Areas associated with tier 1 industrial facilities identified in Wis. Admin. Code § NR 216.21(2)(a), including storage, loading, rooftop and parking.

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

(3) Fueling and vehicle maintenance areas.

(4) Areas within 1,000 feet upgradient or within 100 feet downgradient of karst features.

(5) Areas with less than three feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock, except this subsection (g)(5) does not prohibit infiltration of roof runoff.

(6) 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.

(7) Areas within 400 feet of a community water system well as specified in Wis. Admin. Code § NR 811.16(4), or within 100 feet of a private well as specified in Wis. Admin. Code § NR 812.08(4) 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 Wis. Admin. Code § NR 720.03(2), are 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 three-foot soil layer with 20 percent fines or greater; or at least a five-foot soil layer with ten percent fines or greater. This does not apply where the soil medium within the infiltration system provides an equivalent level of protection. This subsection (g)(9) does not prohibit infiltration of roof runoff.

(h) *Infiltration exemptions.* The following are not required to meet the requirements of this section:

(1) Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the site.

(2) Parking areas and access roads less than 5,000 square feet for commercial and industrial development.

(3) Redevelopment post-construction sites.

(4) In-fill development areas less than five acres.

(5) Infiltration areas during periods when the soil on the site is frozen.

(6) Roads in commercial, industrial and institutional land uses, and arterial residential roads.

(i) *Exceptions to discharge quantity and quality management requirements.* The village may establish stormwater management requirements either more or less stringent than those set forth in this section, provided that at least one of the following conditions apply:

(1) The village manager and village engineer determine that a higher level of protection shall be needed to protect sensitive resources.

(2) The village manager and village engineer determine that a higher level of protection from flooding shall be required to protect the public health and safety.

(3) The village manager and village engineer determine that more restrictive discharge controls shall be needed because existing downstream conveyance or storage facilities shall be rendered inadequate as a result of development activity.

(4) The village manager and village engineer determine that the land development activity shall be covered by an approved stormwater management system plan that contains management requirements consistent with the purpose and intent of this article.

(5) Provisions are made to manage stormwater by an off-site facility, 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 equal to or greater than would be provided by on-site practices meeting the requirements of this section.

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

d. The village manager and the village engineer finds that meeting the minimum on-site management requirements of this section is not feasible due to space or site restrictions.

(j) *Protective areas.*

(1) The term "protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this subsection, the term "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location. Suggest following model ordinance, small changes to the language below, including h and j.

a. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in Wis. Admin. Code § NR 103.04: 75 feet.

b. For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current: 50 feet.

c. For lakes: 50 feet.

d. For wetlands not subject to par. e. or f., 50 ft.

e. For highly susceptible wetlands: 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins. Wetland boundary delineations shall be made in accordance with Wis. Admin. Code § NR 103.08(1m). This subsection does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.

f. For less susceptible wetlands: ten percent of the average wetland width, but no less than ten feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.

g. In subsections (j)(1)a, d and e of this section, determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in Wis. Admin. Code § NR 103.03.

h. Wetland boundary delineation shall be made in accordance with s. NR 103.08 (1m). This paragraph does not apply to wetlands that have been completely filled in compliance with all applicable state and federal regulations. The protective area for wetlands that have been partially

filled in compliance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after a fill has been placed. Where there is a legally authorized wetland fill, the protective area standard need not be met in that location.

i. For concentrated flow channels with drainage areas greater than 130 acres: ten feet.

j. Notwithstanding pars. a. to i., the greatest protective area width shall apply where rivers, streams, lakes and wetlands are contiguous.

(2) This subsection (j) applies to post-construction sites located within a protective area, except those areas exempted pursuant to subsection (j)(4) of this section.

(3) The following requirements shall be met:

a. Impervious surfaces shall be kept out of the protective area to the maximum extent practicable. The stormwater management plan shall contain a written site-specific explanation for any parts of the protective area that are disturbed during construction.

b. Where land disturbing construction activity occurs within a protective area, and where no impervious surface is present, adequate sod or self-sustaining vegetative cover of 70 percent or greater shall be established and maintained. The adequate sod or self-sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non-vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion, such as on steep slopes or where high velocity flows occur.

c. Best management practices such as filter strips, swales, or wet detention basins, which are designed to control pollutants from non-point sources may be located in the protective area.

(4) This subsection (j) does not apply to:

a. Redevelopment post-construction sites.

b. In-fill development areas less than five acres.

c. Structures that cross or access surface waters such as boat landings, bridges and culverts.

d. Structures constructed in accordance with Wis. Stats. § 59.692(1v).

e. Post-construction sites from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability. Including wetlands, without first being treated by a BMP to meet the local ordinance requirements for total suspended solids and peak flow reduction, except to the extent that vegetative ground cover is necessary to maintain bank stability.

(k) *Credit for removal of impervious surfaces.*

(1) *Same site credit.* The village manager and village engineer may use the removal of pavement, covered structures or other impervious surfaces at the same property to calculate the net post construction impervious acreage and corresponding water quantity management duties. Credit may equal, but not be larger than, the acreage of impervious surfaces removed when runoff release rates and detention are the best management practices utilized at the site. When best management practices with a higher order of preference are utilized in lieu of detention, equivalent credit may be granted as determined by the village manager and the village engineer with the concurrence of the MMSD. Credit for reducing impervious surfaces at a site, not utilized by the development on the site, belongs to the department of public works and may be banked for allocation to other development within the watershed under subsection (k)(2) of this section.

(2) *Dispersed site in same watershed credit.* The village manager and village engineer may bank the removal of impervious surfaces, which individually must be one-half acre or more, within the same watershed, where the volume, timing and peak flow of runoff will be distributed over the critical time sufficient to assure the level of protection provided by MMSD flood abatement projects will not be

reduced. The village manager and the village engineer may allocate banked credit to promote a policy of smart growth. The total acreage banked or allocated, or both, shall be reported, by watershed or sub-watershed, annually to the MMSD for concurrence.

(l) *General considerations for on-site and off-site stormwater management measures.* The following considerations shall be observed in managing stormwater runoff:

(1) 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 section.

(2) Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.

(3) BMPs for water quantity management shall utilize the following techniques, in order of preference:

a. Preservation of the natural features of development sites, including natural storage and infiltration characteristics;

b. Preservation of existing natural streams, channels, and drainage ways;

c. Minimization of new impervious surfaces;

d. Conveyance of stormwater in open vegetated channels;

e. Construction of structures that provide both quantity and quality control, with structures serving multiple sites being preferable to structures serving individual sites; and

f. Construction of structures that provide only quantity control, with structures serving multiple sites being preferable to structures serving individual sites.

(m) *Location and regional treatment option.*

(1) The BMPs may be located on-site or off-site as part of a regional stormwater device, practice or system within the same watershed.

(2) Runoff within a non-navigable drainage way that flows into a BMP, such as a wet pond, is not required to meet water quality performance standards unless designed to provide treatment. This regional treatment option does not supersede any other federal, state or local regulation of post-construction runoff, such as Wis. Admin. Code ch. NR 103 and Wis. Stats. ch. 30.

(3) The discharge of runoff from a BMP, such as a wet pond, or after a series of such BMPs is subject to this article.

(4) The village manager and the village engineer may approve off-site management measures provided that all of the following conditions are met:

a. The village manager and the village engineer determines that the post-construction runoff is covered by a stormwater management system plan that is approved by the village and that contains management requirements consistent with the purpose and intent of this article.

b. The off-site facility meets all of the following conditions:

1. The facility is in place.

2. The facility is designed and adequately sized to provide a level of stormwater control equal to or greater than that which would be afforded by on-site practices meeting the performance standards of this article.

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

(5) Where a regional treatment option exists such that the village manager and the village engineer exempts the applicant from all or part of the minimum on-site stormwater management requirements, the applicant shall be required to pay a fee in lieu of stormwater management practices.

(n) *Fee in lieu of on-site stormwater management practices.* Where the village waives all or part of the minimum on-site stormwater management requirements under this section, the applicant may be required to pay a fee in an amount determined in negotiation with the village. In setting the fee for land development projects, the village manager and the village engineer shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the on-site or regional stormwater management practices needed to serve the land development.

(Ord. No. 09-600, § 1(5), 8-6-2009)

Sec. 107-51. Permitting requirements, procedures and fees.

(a) *Permit required.* No landowner or land operator may undertake a land development activity subject to this section without receiving a permit from the village prior to commencing the proposed activity.

(b) *Permit application, fees, and costs.* Unless specifically excluded by this section, any landowner or operator desiring a permit shall submit to the village a permit application made on a form provided.

(1) Unless otherwise excepted by this section, a permit application must be accompanied by the following in order that the permit application be considered by the village manager and the village engineer: a stormwater management plan, a maintenance agreement, financial guarantee, and a nonrefundable permit administration fee.

(2) The stormwater management plan, maintenance agreement, financial guarantee, and fees shall meet the requirements of this section.

(3) The applicant shall reimburse the village for all of the village's costs and expenses incurred (including professional and attorneys' fees) in reviewing the application.

(c) *Review and approval of permit application.* The village manager and the village engineer shall review any permit application that is submitted with a stormwater management plan, maintenance agreement, financial guarantee, and the required fees. The following approval procedure shall be used:

(1) Within 30 business days of the receipt of a complete permit application, including all items as required by this section, the village manager and the village engineer shall inform the applicant whether the application, plan and maintenance agreement are approved or disapproved.

(2) If the stormwater permit application, plan and maintenance agreement are approved, or if an agreed upon payment of fees in lieu of stormwater management practices is made, the village manager and the village engineer shall issue the permit.

(3) If the stormwater permit application, plan or maintenance agreements are disapproved, the village manager and the village engineer shall detail in writing the reasons for disapproval.

(4) If additional information is submitted, the village manager and the village engineer shall have 15 business days from the date the additional information is received to inform the applicant that the plan and maintenance agreement are either approved or disapproved.

(d) *Permit conditions.* All permits issued under this section shall be subject to the following conditions, and holders of permits issued under this section shall be deemed to have accepted these conditions. The village manager and the village engineer may suspend or revoke a permit for violation of a permit condition, following written notification of the permittee. An action to suspend or revoke this permit may be appealed in accordance with this section.

(1) Compliance with this permit does not relieve the permit holder of the responsibility to comply with other applicable federal, state, and local laws and regulations.

(2) The permit holder shall design and install all structural and non-structural stormwater management measures in accordance with tile approved stormwater management plan and this permit.

(3) The permit holder shall notify the village at least three working days before commencing any work in conjunction with the stormwater management plan, and within the next working day upon completion of the stormwater management practices. If required as a special condition, the permit holder shall make additional notification according to a schedule set forth by the village so that practice installations can be inspected during construction.

(4) Practice installation required as part of this section shall be certified "as-built" by a licensed professional engineer. Completed stormwater management practices must pass a final inspection to determine if they are in accordance with the approved stormwater management plan and this section. The village 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.

(5) The permit holder shall notify the village of any significant modifications it intends to make to an approved stormwater management plan. The village may require that the proposed modifications be submitted for approval prior to incorporation into the stormwater management plan and execution.

(6) The permit holder shall maintain all stormwater management practices in accordance with the stormwater management plan until the practices are transferred to subsequent private owners as specified in the approved maintenance agreement.

(7) The permit holder authorizes the village to perform any work or operations necessary to bring stormwater management measures into conformance with the approved stormwater management plan, and consents to a special assessment or charge against the property as authorized under Wis. Stats. § 66.0627, as amended from time to time, or to charging such costs against the financial guarantee posted under this section.

(8) If so directed by the village, the permit holder shall repair at the permit holder's own expense all damage caused by stormwater runoff, where such damage is caused by activities that are not in compliance with the approved stormwater management plan.

(9) The permit holder shall permit property access to authorized village personnel for the purpose of inspecting the property for compliance with the approved stormwater management plan and this permit.

(10) Where a stormwater management plan involves changes in direction, increases in peak rate and/or total volume of runoff from a site, the village may require the permittee to make appropriate legal arrangement with adjacent property owners concerning the prevention of endangerment to property or public safety.

(11) The permit holder is subject to the enforceable actions detailed in this section if the permit holder fails to comply with the terms of this permit.

(e) *Permit conditions.* Permits issued under this section may include conditions established by the village in addition to the requirements needed to meet the performance standards in section 107-50 or a financial guarantee as provided for in section 107-54.

(f) *Permit duration.* Permits issued under this section shall be valid from the date of issuance through the date the village notifies the permit holder that all stormwater management practices have passed the final inspection required under the permit.

(Ord. No. 09-600, § 1(6), 8-6-2009)

Sec. 107-52. Stormwater management plan contents.

(a) *Plan requirements.*

(1) The stormwater management plan required under this article shall contain any information the village may need to evaluate the environmental characteristics of the area affected by land development activity, the potential impacts of the proposed development upon the quality and quantity of stormwater discharges, the potential impacts upon water resources and drainage utilities, and the effectiveness and acceptability of proposed stormwater management measures in meeting the performance standards set forth in this section.

(2) The plan shall include computations of peak flow rates and discharge volumes at each point of discharge into and out of the site concerned under existing and planned development and redevelopment conditions. The data shall include times of concentration to key junctions in flow paths and to points of discharge into and out of the site.

(3) The plan shall consist of narrative descriptions and explanations; maps, charts, and graphs; tables; photographs; supporting calculations; and references to recognized engineering text and manuals as may be necessary to provide a clear and concise description of the plan. The sources of maps and data presented in the plan shall be identified.

(4) For phased developments, the site development stormwater management plan shall consider the cumulative effect of all phases.

(5) Unless specified otherwise by this section, stormwater management plans shall contain, at a minimum, the following information:

a. Name, address, and telephone number for the following or their designees: landowner; developer; project engineer for practice design and certification; person responsible for installation of stormwater management practices; person responsible for maintenance of stormwater management practices prior to the transfer, if any, of maintenance responsibility to another party.

b. A proper legal description of the property proposed to be developed referenced to the U.S. Public Land Survey system or to block and lot numbers with a recorded land subdivision plat.

c. Description of pre-development site conditions and supporting documentation.

d. Description of post-development site conditions and supporting documentation.

e. Description of post-development anticipated impacts and supporting documentation.

f. Description of proposed stormwater management facilities and measures and supporting documentation.

(b) *Pre-development site conditions.* The plan shall include a map and description of the existing conditions of the site concerned including:

(1) A map of the site at a scale of one inch equals 100 feet or larger showing the property boundaries referenced to the U. S. Public Land Survey system or to a lot and block of a recorded subdivision plat; the topography of the site including contours shown at an interval of two feet or less, together with such spot elevations as may be necessary; the contours and spot elevations shall be referenced to the National Geodetic Vertical Datum of 1929, or to village datum with prior written approval from the village;

(2) The hydrologic and hydraulic characteristics of the site including drainage flow paths and directions of flow onto, through, and out of the site; related drainage basin boundaries, including off-site tributary areas; times of concentration;

(3) The location of areas where stormwater may collect or percolate into the ground;

(4) Locations where runoff enters the site from adjacent tributary areas together with the size of those areas expressed in acres;

(5) Locations where runoff leaves the site and the contributing watersheds to each of these locations expressed in acres;

(6) Groundwater elevations referred to the National Geodetic Vertical Datum of 1929 or to village datum with prior written approval from the village;

(7) Soils by hydrologic group;

(8) Cover type and condition;

(9) Location and extent of impervious surfaces, including type and condition of the surfaces;

(10) Locations and outlines of all buildings or other structures;

(11) Location of all receiving bodies of surface water on or within 100 feet of the site into which stormwater flows;

(12) Locations and size of wetlands on or within 100 feet of the site;

(13) Location and extent of the 100-year recurrence interval flood hazard area associated with any perennial stream or watercourse on or within 100 feet of the site;

(14) Information regarding current water quality objectives and current water quality conditions in any perennial watercourses located on or within 100 feet to the site;

(15) Locations, sizes, and elevations of all existing storm sewers, channels, ditches, detention or retention ponds, or other engineered drainage facilities on or within 100 feet of the site; the elevations being referred to the National Geodetic Datum of 1929 or to village datum with prior written approval from the village.

(c) *Proposed post-development site conditions.* The plan shall describe the alterations proposed as to the site and the resulting proposed post-development conditions. The description shall include:

(1) 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;

(2) Proposed changes in the planimetry of the site, and in the topography of the site by contours having the same contour interval and referred to the same datum as used to present the topography of the existing site conditions;

(3) The location and outline of all proposed buildings or other structures;

(4) Changes in the location, extent and type of impervious surfaces;

(5) The location and extent of areas where vegetation is to be disturbed or planted;

(6) Impacts on existing natural storage or infiltration areas;

(7) Changes in the drainage flow paths into, through, and out of the site, and related changes in drainage basin boundaries;

(8) The location, elevations, and sizes of all proposed minor and major stormwater management facilities; the former including all storm sewers and inlets, and the latter including curbed roadways, roadway ditches, culverts, storage facilities, and interconnected flow paths; all elevations being referred to the National Geodetic Vertical Datum of 1929 or to village datum with prior written approval from the village;

(9) Any changes to lakes, streams, watercourses, or wetlands on or within 100 feet of the site concerned; and

(10) The location and widths of required public rights-of-way or easements needed to accommodate the recommended stormwater management facilities.

(d) *Anticipated impacts.* The plan shall contain a description of the following anticipated impacts of stormwater runoff from the proposed development, redevelopment, or land development as managed by the facilities and measures recommended in the plan:

(1) 1. Computed runoff discharge rate as indicated by Chapter 13 MMSD rules and NR 151 WDNR regulations;

(2)

(3) Computed runoff volume for the 1.5-inch, four-hour rainfall;

(4) All major assumptions used in developing input parameters shall be clearly stated. The computations shall be made for each discharge point in to and out of the site, and the geographic areas used in making the calculations shall be clearly cross-referenced to the required map, including off-site tributary watershed areas;

(5) Changes in the locations and conveyance capacities of stormwater discharge points from and to the site concerned;

(6) Adequacy of receiving storm sewer, engineered stormwater management facility or watercourse to convey or store the anticipated peak rate of stormwater discharge from the site concerned, giving due consideration to existing and off-site flows;

(7) Changes in the location and extent of the 100-year recurrence interval flood hazard area of any perennial watercourse location within, through, or within 100 feet of, the site concerned;

(8) Results of investigations of soils and groundwater required for the placement and design of stormwater management measures; and

(9) Changes in groundwater elevations referred to National Geodetic Vertical Datum of 1929 or to village datum with prior written approval from the village.

(e) *Proposed stormwater management facilities and measures.*

(1) The plan shall include a definitive description of the proposed stormwater management facilities and measures for the control of the quantity and quality of the anticipated stormwater runoff from the proposed development, redevelopment, or land division.

(2) All site investigations, plans, designs, computations, and drawings shall be certified as prepared in accordance with accepted current engineering practice and in accordance with technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V, and "Standard Specifications for Sewer and Water Construction in Wisconsin."

(3) The description of the proposed management facilities shall include:

a. For detention and retention facilities: locations, areas, depths, volumes, inlet and outlet configurations, and elevation of the bottoms, and of key inlet and outlet control structures; all elevations being referred to National Geodetic Vertical Datum of 1929 or to village datum with prior written approval from the village;

b. For conveyance facilities: locations of inlets and manholes and associated rim and invert elevations, and pipe sizes, slope and materials; locations, elevations, and cross-sections of ditches, swales and channels; and culvert sizes, inlet and outlet configurations and elevations; all elevations being referred to National Geodetic Vertical Datum of 1929 or to village datum with prior written approval from the village;

c. Design computations and all applicable assumptions for the stormwater conveyance (open channel, closed pipe, etc.) system;

d. Detailed drawings including cross-sections and profiles of all permanent stormwater conveyance and treatment practices;

e. Design computations and all applicable assumptions for stormwater quality practices (sedimentation type, filtration type, infiltration type) as needed to show that practices are appropriately sized to accommodate runoff from the 1.5-inch rainfall;

f. For practice designs that depart from those specified in the technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V, the results of continuous simulation modeling, conducted according to the guidelines established in that manual, shall be presented in such a way as to show the reduction in average annual total suspended solids loading from the developed site;

g. Erosion control plan in accordance with the technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V;

h. Measures to abate any potential pollution of surface waters and groundwaters;

i. A schedule for the construction of the recommended stormwater management facilities and estimates of attendant capital and operation and maintenance costs;

j. A maintenance plan developed for the life of each stormwater management practice including the required maintenance activities and maintenance activity schedule;

k. A landscaping plan in accordance with technical standards identified, developed or disseminated by the state department of natural resources under Wis. Admin. Code ch. NR 151, subch. V; and

l. Other information as needed by the village to determine compliance of the proposed stormwater management measures with the provisions of this section.

(f) *Exceptions.* The village may prescribe alternative submittal requirements for applicants seeking an exemption to on-site stormwater management performance standards under this section.

(Ord. No. 09-600, § 1(7), 8-6-2009)

Sec. 107-53. Maintenance.

(a) *Maintenance agreement required.* The maintenance agreement required for stormwater management practices under this section shall be an agreement between the village and the permittee to provide for maintenance of stormwater practices beyond the duration period of this permit. The agreement or recordable document shall be recorded with the Milwaukee County Register of Deeds or the Ozaukee County Register of Deeds so that it is binding upon all subsequent owners of land served by the stormwater management practices.

(b) *Agreement provisions.* The maintenance agreement shall contain the following information and provisions:

(1) Identification of the stormwater facilities and designation of the drainage area served by the facilities;

(2) A schedule for regular maintenance of each aspect of the stormwater management system consistent with the stormwater management plan;

(3) Identification of the landowner, organization or municipality responsible for long-term maintenance of the stormwater management practices;

(4) The landowner, organization, or municipality shall maintain stormwater management practices in accordance with the schedule included in the agreement;

(5) The village is authorized to access the property to conduct inspections of stormwater practices as necessary to ascertain that the practices are being maintained and operated in accordance with the agreement;

(6) The village 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 stormwater management practice into proper working condition;

(7) If the village notifies the party designated under the maintenance agreement of maintenance problems that require correction, the specific corrective actions shall be taken within a reasonable time frame determined by the village; and

(8) The village 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 village shall enter the amount due on the tax rolls and collect the money as a special charge against the property pursuant to Wis. Stats. § 66.0627, as amended from time to time.

(Ord. No. 09-600, § 1(8), 8-6-2009)

Sec. 107-54. Financial guarantee.

(a) *Establishment of the guarantee.* The village may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the village. The financial guarantee shall be in an amount determined by the village to be the estimated cost of construction and the estimated cost of maintenance during the period which the designated party in the maintenance agreement has maintenance responsibility. The financial guarantee shall give the village the authorization to use the funds to complete the project if the landowner defaults or does not property implement the approved stormwater management plan.

(b) *Conditions for release.* Conditions for the release of the financial guarantee are as follows:

(1) The village shall release the portion of the financial guarantee established to assure installation of stormwater practices, minus any costs incurred by the village to complete installation of practices, upon submission of "as-built plans" by a licensed professional engineer. The village may make provisions for a partial pro-rata release of the financial guarantee based on the completion of various development stages; and

(2) The village shall release the portion of the financial security established to assure maintenance of stormwater practices, minus any costs incurred by the village, at such time that the responsibility for practice maintenance is passed on to another entity via an approved maintenance agreement.

(Ord. No. 09-600, § 1(9), 8-6-2009)

Sec. 107-55. Fee schedule.

Fees referred to in this article shall be determined by the village board and may from time to time be modified by ordinance or resolution. Fees shall be related to costs involved in handling permit applications, reviewing control plans, conducting site inspections, and administering the stormwater management program by village personnel. All costs incurred by the village in processing a permit or application under this article, including, but not limited to, engineering, legal, and other expert and professional fees, shall be paid to the village by the applicant. Failure to pay such fees shall void and invalidate any and all building and stormwater management permits issued under this article.

(Ord. No. 09-600, § 1(10), 8-6-2009)

Sec. 107-56. Illicit discharges and unauthorized connections.

(a) *Discharges prohibited.* No person may discharge, spill or dump substances or materials which are not entirely composed of stormwater into receiving bodies of water, storm sewers of drainage facilities, or onto driveways, sidewalks, parking lots or other wares that discharge into the village drainage system.

(b) *Connections prohibited.*

(1) It shall be a violation of this article to connect a sanitary sewer pipe or drain, connect a pipe or drain that contributes pollutants associated with industrial activity, or connect any other hydraulic conveyance facility that introduces non-stormwater discharges to the village stormwater drainage system and facilities. All such non-stormwater discharges into the village stormwater system and facilities shall be defined as illicit discharges.

(2) Illicit discharges shall cease, desist, and be abated by the person or persons responsible within 24 hours of notice from the building inspector. If the person or persons responsible fail to cease, desist, and abate the illicit discharge, the village may take such action itself and seek reimbursement in municipal or circuit court or via special assessment under Wis. Stats. § 66.0627.

(c) *Exemptions.* The following activities are exempt from the provisions of this section unless found to have an adverse impact on the stormwater:

(1) Discharges authorized by a permit issued by the state department of natural resources;

(2) Discharges resulting from firefighting activities;

(3) Discharges in compliance with construction site erosion controls or stormwater management regulations contained in this section;

(4) Facility maintenance activities undertaken by any federal, state, county, or municipal agency, such activities, however, being subject to construction erosion control measures; and

(5) Discharges from uncontaminated pumped groundwater, potable water source, roof drains, foundation drain and sump pump, air conditioning condensation, springs, lawn watering or irrigation, individual residential car washing, and swimming pools if the water has been dechlorinated.

(d) *Penalty.* Violations shall be subject to enforcement procedures and penalties set forth in section 107-57.

(Ord. No. 09-600, § 1(11), 8-6-2009)

Sec. 107-57. Inspection, enforcement and penalties.

(a) *Inspection.* Village personnel shall carry out inspections, investigations, and monitoring to assess and confirm compliance with the requirements of this section.

(1) Village personnel will inspect, conduct surveillance, and monitor the municipal drainage system and discharge outfalls on an annual basis to assess system performance and water quality. Findings of noncompliance with this section during regular inspection, surveillance, or monitoring of the village drainage system shall initiate further investigation to identify the source of the pollution discharge to the drainage system.

(2) Village personnel will inspect land development activity for compliance with permit conditions as defined in this section.

(3) Village personnel shall be permitted to enter and inspect facilities subject to regulation under this article as often as may be necessary to determine compliance with this article.

a. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the village.

b. Facility operators shall allow the village ready access to all parts of the premises for the purpose of inspection, sampling, examination and copying of records.

c. The village shall have the right to set up on any facility such devices as are necessary in the opinion of the village to conduct monitoring and/or sampling of the facility's stormwater discharge.

d. The village has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all time in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.

e. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the village and shall not be replaced. The costs of clearing such access shall be borne by the operator.

f. Unreasonable delays in allowing the village access to a facility is a violation. A person who is the operator of a facility commits an offense if the person denies the village reasonable access to the facility for the purpose of conducting any activity authorized or required by this article.

(b) *Special inspection warrant.* If the village has been refused access to any part of the premises from which stormwater is discharged, and is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this article or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the village may seek issuance of a special inspection warrant per Wis. Stats. § 66.0119.

(c) *Public nuisance.* The following shall be deemed to constitute public nuisances and may be prosecuted as such by the village or by aggrieved property owners:

(1) Any development, redevelopment, or property land division that is commenced without an approved stormwater management plan as required by this section;

(2) Any land development activity initiated after the effective date of the ordinance from which this article is derived by any person, firm, association, or corporation subject to the article provisions shall be deemed a violation unless conducted in accordance with said provisions;

(3) Any drainage facility not maintained in accordance with this article;

(4) Any illicit discharge as defined in this article to the village stormwater drainage system and facilities; and

(5) Any activity that adversely impacts on surface water or groundwater quality or endangers the health and safety of the public.

(d) *Compliance order.* The village shall notify the responsible owner or operator by certified mail of any noncomplying 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.

(1) Upon receipt of written notification from the village, the responsible owner or operator of the noncomplying activity or property shall make corrections as necessary to meet the requirements set forth in this article.

(2) If the permit holder or the person in violation of this section continues noncompliant practices, village personnel may enter upon the land and perform the work or other operations necessary to bring the said activity into conformance with requirements of this article. The village shall keep a detailed accounting of the costs and expenses of performing this work. If applicable, these costs and expenses shall be deducted from any financial security posted pursuant to this section. 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 entered on the tax roll as a special charge against the property and collected with any other taxes levied thereon for the year in which the work is completed.

(3) The village manager or designate is authorized to post a stop-work order on all activity in violation of this article, or to request the village attorney to obtain a cease and desist order.

(4) If the violations to this article are likely to result in damage to private properties, public facilities, or waters of the state, village personnel may take emergency actions necessary to prevent such damage. The costs incurred by the village plus interest and legal costs shall be billed to the owner of title of the property.

(5) The village manager and the village engineer may revoke a permit issued under this article for noncompliance with this article.

(6) Any person, firm, association, or corporation who does not comply with the provisions of this article shall be subject to a forfeiture of not less than $50.00 nor more than $1,000.00 per offense, together with the costs of prosecution. Each day that the violation exists shall constitute a separate offense.

(7) Compliance with this article may be enforced by injunction, citation, and abatement of nuisance or other appropriate and available remedy. It shall not be necessary to prosecute for forfeiture before resorting to injunctional proceedings.

(e) *Notification of spills.*

(1) Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation, has information of any known or suspected release of material which are resulting or may result in illicit discharges or pollutants discharging into stormwater, the MS4, or waters of the state, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous material, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the village in person or by phone or facsimile no later than the next business day. Notification in person or by phone shall be confirmed by written notice addressed and mailed to the village within ten business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least five years.

(2) Failure to provide notification of a release as provided above is a violation of this article.

(Ord. No. 09-600, § 1(12), 8-6-2009)

Sec. 107-58. Appeals.

(a) *Board of appeals.* The board of appeals created pursuant to section 125-57, as authorized by Wis. Stats. §§ 62.23(7)(e) and 68.11, as amended from time to time:

(1) Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the village in administering this article;

(2) Upon appeal, may authorize variances from the provisions of this article which are not contrary to the public interest and where owing to special conditions a literal enforcement of the provisions of this article will result in unnecessary hardship;

(3) Shall use the rules, procedures, duties and powers authorized by statute in hearing and deciding appeals and authorizing variances; and

(4) Shall be authorized to grant full or partial special exceptions pursuant to section 125-57.

(b) *Who may appeal.* Appeals to the board of appeals may be taken by any aggrieved party.

(Ord. No. 09-600, § 1(13), 8-6-2009)

Secs. 107-59—107-89. Reserved.

Section Two: Sections 107-90 through 107-99 are hereby repealed and deleted.

Section Three: Severability: In the event that any provision of this Ordinance is for any reason held to be invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portions of this Ordinance shall be deemed separate, distinct and independent provisions of the Ordinance and all remaining portions of this Ordinance shall remain in full force and effect.

Section Four: All ordinances or parts of ordinances conflicting with the provisions of this ordinance are hereby to such extent repealed.

Section Five: This ordinance shall take effect and be in force after its passage and posting pursuant to law.

PASSED AND ADOPTED by the Village Board of Trustees of the Village of Bayside this fifteenth day of June, 2023.

VILLAGE OF BAYSIDE

Eido M. Walny, Village President

Rachel A. Safstrom, Administrative Service Director