

Due by March 31, 2016

Notice: Pursuant to s. NR 216.07(8), Wis. Adm. Code, an owner or operator of a Municipal Separate Storm Sewer System (MS4) is required to submit an annual report to the Department of Natural Resources (DNR) by March 31 of each year to report on activities for the previous calendar year. This form is being provided by the DNR for the user's convenience. Personal information collected will be used for administrative purposes and may be provided to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

This form is for reporting on activities undertaken in calendar year 2015.

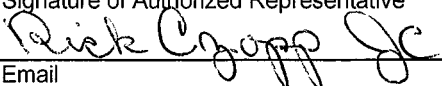
Instructions: Complete each section of the form that follows. If additional space is needed to respond to a question, attach additional pages. Provide descriptions that explain the program actions taken to comply with the general permit. Complete and submit the annual report by March 31, 2016, to the appropriate address indicated on the last page of this form.

SECTION I. Municipal Information			
Name of Municipality		Facility ID No. (FIN)	
Town of Brookfield		30730	
Mailing Address	City	State	ZIP Code
645 North Janacek Road	Brookfield	WI	53045
County(s) in which Municipality is located	Municipality Type: (select one)		
Waukesha	<input type="radio"/> County <input type="radio"/> City <input type="radio"/> Village <input checked="" type="radio"/> Town <input type="radio"/> Other (specify)		

SECTION II. Municipal Contact Information			
Name of Municipal Contact Person		Title	
Rick Czopp		Administrator	
Mailing Address (if different from above)	City	State	ZIP Code
		WI	
Email	Phone Number (include area code)	Fax Number (include area code)	
administrator@townofbrookfield.com	(262) 796-3788	(262) 796-0339	

SECTION III. Certification

I hereby certify that I am an authorized representative of the municipality covered under MS4 General Permit No. WI-S050075-2 for which this annual report is being submitted and that the information contained in this document and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.

Authorized Representative Printed Name	Authorized Representative Title		
Rick Czopp	Administrator		
Signature of Authorized Representative	Date		
	3/31/2016		
Email	Phone Number (include area code)	Fax Number (include area code)	
administrator@townofbrookfield.com	(262) 796-3788	(262) 796-0339	

SECTION IV. General Information

- a. Describe what efforts the municipality has undertaken to invite the municipal governing body, interest groups, and the general public to review and comment on the annual report.
 The annual report is available through the town's website. The web link to the stormwater portion of the Town's website has been put on display on the public counter in the Town Clerk's office. A hard copy of the Annual Report is kept at the front counter of the town hall.
- b. Describe how elected and municipal officials and appropriate staff have been kept apprised of the municipal storm water discharge permit and its requirements.
 These groups are presented the municipal stormwater permit and its requirements through scheduled briefings. regular updates are also provided to outline any changes in the permit requirements and to show how the current requirements are being met.
- c. Has the municipality prepared its own municipal-wide storm water management plan? Yes No
 If yes, title and date of storm water management plan:
 1) Stormwater Management Plan for the Town of Brookfield, September 1998
 2) Stormwater Quality Management Plan (draft), December 2009

SECTION IV. General Information (continued)

d. Has the municipality entered into a written agreement with another municipality or a contract with another entity to perform one or more of the conditions as provided under section 2.10 of the general permit? Yes No

If yes, describe these cooperative efforts:

SEE SECTION 3.c OF THE ATTACHMENT

e. Does the municipality have an internet website? Yes No

If yes, provide web address:

<http://www.townofbrookfield.com/>

If the municipality has an internet website, is there current information about or links provided to the MS4 general permit and/or the municipality's storm water management program?

Yes No

If yes, provide web address:

<http://townofbrookfield.com/stormwater.html>

SECTION V. Permit Conditions

a. Minimum Control Measures: For each of the permit conditions listed below, provide a description of the implementation of each program element, the status of meeting measurable goals, and compliance with permit schedule in section 2.11 of the MS4 general permit. Provide an evaluation of program compliance with the general permit, the appropriateness of identified best management practices, and progress towards achieving identified measurable goals. Be specific in describing the actions that have been taken during the reporting year to implement each permit condition and whether measurable goals have been met, including any data collected to document a measurable goal. Also, explain the reasons for any variations from the compliance schedule in the MS4 general permit.

- Public Education and Outreach

SEE ITEM 3.b OF THE ATTACHMENT

- Public Involvement and Participation

SEE ITEM 3.b OF THE ATTACHMENT

- Illicit Discharge Detection and Elimination

SEE ITEM 3.a AND 3.k OF THE ATTACHMENT

- Construction Site Pollutant Control

SEE ITEM 3.l OF THE ATTACHMENT

- Post-Construction Storm Water Management

SEE ITEM 3.n OF THE ATTACHMENT

- Pollution Prevention

SEE ITEM 3.n OF THE ATTACHMENT

b. Winter Road Management Activities:

Provide the name, title, and phone number for the individual(s) with overall responsibility for winter roadway maintenance.

SEE ITEM 3.h AND 3.n(2) OF THE ATTACHMENT

Describe the types of products used for winter road management (e.g., deicing, pre-wetting, salting, etc.).

SEE ITEM 3.h AND 3.n(2) OF THE ATTACHMENT

SECTION V. Permit Conditions (continued)

Describe the type of equipment used to apply the products.

SEE ITEM 3.h AND 3.n(2) OF THE ATTACHMENT

Report the amount of product used per month.

SEE ITEM 3.h AND 3.n(2) OF THE ATTACHMENT

Report the snow disposal locations, if snow is hauled away.

SEE ITEM 3.h AND 3.n(2) OF THE ATTACHMENT

Describe any anti-icing, equipment calibration, and salt reduction strategies considered.

SEE ITEM 3.h AND 3.n(2) OF THE ATTACHMENT

Describe any other additional measurable data or information that the permittee used to evaluate its winter road management activities.

SEE ITEM 3.h AND 3.n(2) OF THE ATTACHMENT

c. Municipal facility(s):

Provide an inventory of municipally owned or operated structural storm water management facility(s), include: Location of each facility and contact information for the individual(s) with overall responsibility for each facility.

SEE ITEM 3.n(1) OF THE ATTACHMENT

Describe the housekeeping activities and best management practices installed to reduce or eliminate storm water contamination.

SEE THE TOWN OF BROOKFIELD STORMWATER POLLUTION PREVENTION PLAN

Discuss recommendations for improvements to current storm water management practices at the facility(s) and a timeline for installation and/or implementation of these recommendations.

SEE ITEM 3.g OF THE ATTACHMENT

Describe the municipal facility(s) employee training on storm water pollution prevention provided.

SEE ITEM 3.c OF THE ATTACHMENT

Describe the spill prevention and response procedures in place at the municipal facility(s).

SEE THE TOWN OF BROOKFIELD STORMWATER POLLUTION PREVENTION PLAN

d. Storm Water Quality Management: Has the municipality completed a pollutant-loading analysis to assess compliance with the 20% TSS reduction developed urban area performance standard? Yes No

If yes, provide the following: Model used SLAMM Version 9.4.0 Reduction (%) 60.79

If no, include a description of any actions the municipality has undertaken during 2015 to help achieve the 20% standard.

Has the municipality completed an evaluation of all municipal owned or operated structural flood control facilities to determine the feasibility of retrofitting to increase TSS removal? Yes No

If yes, describe:

PREVIOUSLY SUBMITTED. NO ADDITIONAL EVALUATIONS HAVE BEEN MADE.

SECTION V. Permit Conditions (continued)

e. **Best Management Practices Maintenance:** Does the municipality have a maintenance program for installed storm water best management practices? Yes No
If yes, describe the maintenance program and any maintenance activities that have occurred for best management practices in 2015. If available, attach any additional information on the maintenance program.

f. **Storm Sewer System Map:** Describe any changes or updates to the storm sewer system map made in the reporting year. Provide an updated map if any changes occurred during the reporting year.
SEE ITEM 2 OF THE ATTACHMENT

SECTION VI. Fiscal Analysis

a. Provide a fiscal analysis that includes the annual expenditures for 2015, and the budget for 2015 and 2016. A table to document fiscal information is provided on page 6.
SEE ITEM 7 OF THE ATTACHMENT

b. What financing/fiscal strategy has the municipality implemented to finance the requirements of the general permit?
 Storm water utility General fund Other _____

c. Are adequate revenues being generated to implement your storm water management program to meet the permit requirements? Yes No

Please provide a brief summary of your financing/fiscal strategy and any additional information that will assist the Department in understanding how storm water management funds are being generated to implement and administer your storm water management program.
SEE ITEM 7 OF THE ATTACHMENT

SECTION VII. Inspections and Enforcement Actions

Note: If an ordinance listed below has previously been submitted and has not been amended since that time, a copy does not need to be submitted again. If the ordinance was previously submitted, indicate such in the space provided.

a. As of the date of this annual report, has the municipality updated or revised its construction site pollutant control ordinance in accordance with subsection 2.4.1 of the general permit? Yes No
If yes, attach copy or provide web link to ordinance:
<http://www.townofbrookfield.com/ordinances.html>

b. As of the date of this annual report, has the municipality updated or revised its post-construction storm water management ordinance in accordance with subsection 2.5.1 of the general permit? Yes No
If yes, attach copy or provide web link to ordinance: <http://www.townofbrookfield.com/ordinances.html>

c. As of the date of this annual report, has the municipality updated or revised its illicit discharge detection and elimination ordinance in accordance with subsection 2.3.1 of the general permit? Yes No
If yes, attach copy or provide web link to ordinance:
<http://www.townofbrookfield.com/ordinances.html>

d. As of the date of this annual report, has the municipality adopted any other ordinances it has deemed necessary to implement a program under the general permit (e.g., pet waste ordinance, leaf management/yard waste ordinance, parking restrictions for street cleaning, etc.)? Yes No
If yes, attach copy or provide web link to ordinance:

e. Provide a summary of available information on the number and nature of inspections and enforcement actions conducted during the reporting period to ensure compliance with the ordinances described in a. to d. above.
SEE ITEM 3.a OF THE ATTACHMENT

SECTION VIII. Water Quality Concerns

a. Does any part of the MS4 discharge to an outstanding resource water (ORW) or exceptional resource water (ERW) listed under s. NR 102.10 or 102.11, Wis. Adm. Code? (A list of ORWs and ERWs may be found on the Department's Internet site at: <http://dnr.wi.gov/topic/surfacewater/orwerw.html>) Yes No
If yes, list:

b. Does any part of the MS4 discharge to an impaired waterbody listed in accordance with section 303(d)(1) of the federal Clean Water Act, 33 USC § 1313(d)(1)(C)? (A list of the most current Wisconsin impaired waterbodies may be found on the Department's Internet site at: <http://dnr.wi.gov/water/impairedsearch.aspx?status=303d>) Yes No
If yes, complete the following:

- Impaired waterbody to which the MS4 discharges:
FOX RIVER, POPLAR CREEK, DEER CREEK, FRAME PARK CREEK, UNDERWOOD CREEK
- Description of actions municipality has taken to comply with section 1.5.2 of the MS4 general permit for discharges of pollutant (s) of concern to an impaired waterbody:
SEE ITME 6 OF THE ATTACHMENT

c. Identify any known water quality improvements in the receiving water to which the MS4 discharges during the reporting period.
SEE ITEM 8 OF THE ATTACHMENT

d. Identify any known water quality degradation in the receiving water to which the MS4 discharges during the reporting period and what actions are being taken to improve the water quality in the receiving water.
SEE ITEM 8 OF THE ATTACHMENT

SECTION IX. Proposed Program Changes

Describe any proposed changes to the storm water management program being contemplated by the municipality for 2016 and the schedule for implementing those changes. Proposed program changes must be consistent with the requirements of the general permit.
SEE ITEM 5 OF THE ATTACHMENT

SECTION X. Other

Any other additional information the permittee would like to provide in the Annual Report regarding their storm water program?

Fiscal Analysis Table. Complete the fiscal analysis table provided below.

Program Element	Annual Expenditure 2015	Budget		Source of Funds
		2015	2016	
Public Education and Outreach				SEE ITEM 7 OF THE ATTACHMENT
Public Involvement and Participation				SEE ITEM 7 OF THE ATTACHMENT
Illicit Discharge Detection and Elimination				SEE ITEM 7 OF THE ATTACHMENT
Construction Site Pollutant Control				SEE ITEM 7 OF THE ATTACHMENT
Post-Construction Storm Water Management				SEE ITEM 7 OF THE ATTACHMENT
Pollution Prevention				SEE ITEM 7 OF THE ATTACHMENT
Storm Water Quality Management (including pollutant-loading analysis)				SEE ITEM 7 OF THE ATTACHMENT
Storm Sewer System Map				SEE ITEM 7 OF THE ATTACHMENT
Other:				

NORTHERN REGION COUNTIES			WEST CENTRAL REGION COUNTIES		
Ashland	Langlade	DNR Service Center	Adams	Marathon	DNR Service Center
Barron	Lincoln	Attn: Storm Water Program	Buffalo	Monroe	Attn: Storm Water Program
Bayfield	Oneida	5301 Rib Mountain Rd.	Chippewa	Pepin	5301 Rib Mountain Rd.
Burnett	Polk	Wausau, WI 54401	Clark	Pierce	Wausau, WI 54401
Douglas	Price	Phone: (715) 359-4522	Crawford	Portage	Phone: (715) 359-4522
Florence	Rusk		Dunn	St. Croix	
Forest	Sawyer		Eau Claire	Trempealeau	
Iron	Taylor		Jackson	Vernon	
	Vilas		Juneau	Wood	
	Washburn		La Crosse		

NORTHEAST REGION COUNTIES			SOUTH CENTRAL REGION COUNTIES		
Brown	Marquette	DNR Northeast Region	Columbia	Jefferson	DNR South Central Region
Calumet	Menominee	Attn: Storm Water Program	Dane	LaFayette	Attn: Storm Water Program
Door	Oconto	2984 Shawano Ave.	Dodge	Richland	3911 Fish Hatchery Rd.
Fond du Lac	Outagamie	Green Bay, WI 54313	Grant	Rock	Fitchburg, WI 53711
Green Lake	Shawano	Phone: (920) 662-5100	Green	Sauk	Phone: (608) 275-3266
Kewaunee	Waupaca		Iowa		
Manitowoc	Waushara				
Marinette	Winnebago				

SOUTHEAST REGION COUNTIES		
Kenosha	Sheboygan	DNR Service Center
Milwaukee	Walworth	Attn: Storm Water Program
Ozaukee	Washington	141 NW Barstow Street,
Racine	Waukesha	Room 180
		Waukesha, WI 53188
		(262) 574-2100

Report for
Town of Brookfield, Wisconsin

NR216 Annual Report for Reporting Year 2015

Prepared for:

Town of Brookfield
645 North Janacek Road
Brookfield, WI 53045

Prepared by:

STRAND ASSOCIATES, INC.®
910 West Wingra Drive
Madison, WI 53715
www.strand.com

March 2016

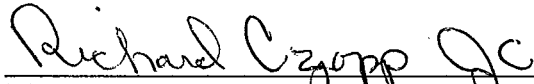


Annual Report Certification
Town of Brookfield
WPDES Permit No. WI-S050105-3
Upper Fox River Watershed Communities Group

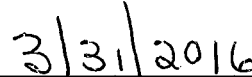
NR 216 Annual Report for Reporting Year 2015

I certify that the material contained in the report is, to the best of my knowledge, true, accurate and complete, and in compliance with the Upper Fox River Watershed Communities Group WPDES Permit.

This report will be made available for inspection and comment by the elected officials of the Town of Brookfield and its citizens.



Richard Czopp, Town Administrator
(262) 796-3788



Date

Purpose

The purpose of this Annual Report is to provide the status of the Town of Brookfield's (Town's) storm water management program. This report is prepared pursuant to Wisconsin Pollutant Discharge Elimination System (WPDES) Permit Issuance No. WI-S050105-3. The contents of this report for calendar year 2015 include information as requested in Part I and II of the permit.

The Town, as a member of the Upper Fox River Watershed Communities Group, received WPDES Permit No. WI-S050105-3 with an effective date of December 1, 2014, and expiration date of November 30, 2019.

1. The status of implementing the storm water management program, and compliance with any schedules contained in the permit.

Action to be taken	Reference	Due Date	Status	Comments
Impaired Water Bodies				
1. Check revised impaired waters list for changes to status of waterways in copermittee's MS4	Part I.G	March 31, 2015, and every odd year thereafter	Ongoing	Submitted 3/31/15
2. Develop a strategy to reduce the pollutants of concern entering impaired water bodies from the municipal storm sewer system	Part I.G	Ongoing	Ongoing	
3. Develop MS4 map with TMDL information for TMDLs approved prior to issuance of this permit	Part I.G	3/31/16	N/A	
4. Develop tabular summary, written compliance plan for TMDLs approved prior to issuance of this permit	Part I.G	3/31/18	N/A	
5. Develop MS4 map with TMDL information for TMDLs approved after issuance of this permit	Part I.G	24 mo. after TMDL approval date	N/A	
6. Develop tabular summary, written compliance plan for TMDLs approved after to issuance of this permit	Part I.G	48 mo. after TMDL approval date	N/A	
Public Education and Outreach Address, at a minimum, the 10 items listed.	Part II.A	Ongoing	Ongoing	See Item 3.b
Public Involvement and Participation Implement the public involvement program.	Part II.B	Ongoing	Ongoing	See Item 3.b
Illicit Discharge Detection and Elimination				
1. Dry weather field screening of priority outfalls	Part II.C.1	Minimum once per year	Ongoing	See Item 3.k
2. Dry weather field screening of all major outfalls	Part II.C.1	At least once every 3 years	Ongoing	
3. Enforce the Illicit Discharge and Connection Storm Water Ordinance	Part II.C.2	Ongoing	Ongoing	See Item 3.d
Construction Site Pollutant Control				
1. Update and enforce the Construction Site Pollutant Control Ordinance	Part II.D	3/31/16	Pending	See Item 3.a
2. Submit Construction Site Pollutant Control Program revision/update	Part II.D	3/31/16	Pending	

Action to be taken	Reference	Due Date	Status	Comments
3. Construction site inspection, documentation, and enforcement	Part II.D	Ongoing	Ongoing	See Item 3.a
Post-construction Storm Water Management				
1. Update and enforce the Post-construction Storm Water Management Ordinance	Part II.E.1	3/31/16	Pending	See Item 3.a and 3.m
2. Continue procedures for long-term maintenance	Part II.E.2	Ongoing	Ongoing	
Pollution Prevention				
1. Inspection and maintenance of structural storm water management facilities	Part II.F.1	Ongoing	Ongoing	See Item 3.f and 3.n(i).a
2. Inventory of storm water facilities	Part II.F.1	Ongoing	Ongoing	See Item 3.n.(i).b
3. Catch basin cleaning	Part II.F.2	Ongoing	Ongoing	See Item 3.f
4. Street sweeping	Part II.F.3&4	Ongoing	Ongoing	See Item 3.e
5. Winter Road Management Plan Revisions	Part II.F.5	3/31/15	Completed	See Item 3.n.(ii) Submitted 3/31/15
6. Proper collection and disposal of leaves and grass clippings	Part II.F.6	Ongoing	Ongoing	See Item 3.n.(iii)
7. Leaf and grass clipping disposal Program update	Part II.F.6	3/31/16	3/31/16	See Item 3.n.(iii)
8. Updated Storm Water Pollution Plan for public works yard, garages, or other municipally owned properties	Part II.F.7	3/31/16	3/31/16	See Item 3.g
9. Inspections of all departments of all public works yards, garages, or other municipally owned properties				
a. Full Inspection	Part II.F.7	Annually	Ongoing	See Item 3.g
b. Visual Inspection	Part II.F.7	Semi-annually	Ongoing	
10. Application of lawn and garden fertilizer on municipally controlled properties	Part II.F.8	Ongoing	Ongoing	See Item 3.n.(vi)
11. Consideration of environmentally sensitive design for municipal projects	Part II.F.9	Ongoing	Ongoing	
12. Water main break and testing sediment and pollution prevention plan	Part II.F.10	3/31/16	Completed	
Storm Water Quality Management				
1. Provide % TSS reduction model results as of June 30, 2011	Part II.G	3/31/15	Completed	See Item 3.i and Item 4
2. Maintain pollutant reduction practices that were in place as of June 30, 2011	Part II.G	Ongoing	Ongoing	See Item 3.i and Item 4
Storm Sewer System Map				
1. Verify currently submitted map accurate or submit updated map	Part II.H	3/31/15	Completed	Submitted 3/31/15
2. Maintain a current storm sewer system map	Part II.H	Ongoing	Ongoing	See Item 2
Annual Report				
1. Submit annual report	Part II.I	3/31/15	Completed	Submitted 3/31/15
		3/31/16	Completed	Submitted 3/31/16
		3/31/17		
		3/31/18		
		3/31/19		
2. Submit new application	Part II.I	3/31/19		

2. Updated storm sewer systems maps, where necessary, to identify any new outfalls, structural controls, or other noteworthy changes.

The storm sewer system map has been updated according to Part II.H of the permit. No updates of note were made to the MS4 in 2015.

3. A summary of the measurable activities from the past calendar year.

a. The number and nature of inspections and enforcement actions conducted to ensure compliance with the required ordinances. (Section II.D.c-f)

The Town monitored 44 work sites in 2015 involving earth altering activities, including single-family new construction and addition and alteration sites, commercial additions, four demolition sites and 23 utility work sites. Among those, six involved the issuance of Grading and Erosion Control permits for disturbed areas exceeding 3,000 square feet.

The Town reported 346 site visits to these sites and logged 250 hours. Field reports of the inspections are on file.

One new construction site failed to stabilize the site or reinstall erosion protection after final grading, resulting in the issuance of a citation and adjudication in Municipal Court. Approximately an additional 162 inspections were completed in 2015 for construction activity concerning interior remodels for both residential and commercial projects. No erosion control issues were part of those projects.

Six additional contacts were made directing corrections to erosion controls as a result of site inspections.

Nature of Inspection	Year				
	2014	2015	2016	2017	2018
Approved Post-construction Storm Water Management Plans	1	12			
Grading and Erosion Control Permits	9	6			
Plan Reviews	4	21			
Construction Site Inspections	128	246			
Erosion Control Inspections	32	184			
Logged Inspection Hours	64	250			
Stop Work Orders/Citations	1	1			
Written Orders/Verbal Contacts	3	6			

2015 was a year marking the beginning of significant re-development phase in the Town of Brookfield.

The Corners of Brookfield, a 19 acre mixed use redevelopment project, years in the planning and approval stage, finally began construction at the flagship entry to the Town.

As a result, Bluemound Road, long a premier commercial corridor in the region, is seeing a surge in commercial interest.

The Corners will offer 400,000 square feet of retail space and 244 apartments, plus 11 acres of underground parking for over 1,900 vehicles. The development will be comprised of nine buildings over the underground parking facility; all proposed to by spring of 2017.

From a stormwater viewpoint, the new development will reduce the amount of impervious surface exposed to the elements. And, with the installation of underground retention, will reduce peak discharges and pollutant loading to Poplar Creek, which runs immediately adjacent to the project site.

Scores of inspections at the site allowed for close attention to any sediment transport issues that arose. An effective erosion control plan and diligent implementation by the construction team, including nearly daily street sweeping allowed for construction to proceed with no visible impact of sediment transport to the creek from outfalls from the site or those from adjacent roadways. Multiple dry weather inspections of the storm outfalls confirmed that conclusion.

- b. *Public education programs within the community, including items that may not be included in the Waukesha County Storm Water program annual summary. (Section II.A)*

The Upper Fox River Watershed Communities Group participates in the Waukesha County Public Information and Education Program to comply with Part II.A of the permit.

The Town also maintains a Web site that provides general information to the community including the purpose of the storm water utility, public assistance information, the annual report, and other information for the United States Environmental Protection Agency (USEPA), Wisconsin Department of Natural Resources (WDNR), and the UW-Extension. The Web site has the following address:

<http://www.townofbrookfield.com/stormwater.html>

In addition to the Web site, the Town publishes and mails quarterly newsletters titled *Town Tidings* to all Town residents. The newsletter articles are posted on the Town’s Web site and can be found at the following web address:

<http://www.townofbrookfield.com/townnews.html>

Over the past year, the newsletter has included articles on yard waste collection, recycling/refuse collection, snow plow reminders, burning tips, and recycling of electronics. Posters can be found on display in the Town Hall for visitors to view.

- c. *Internal education efforts, including what topics were discussed, who the target audiences were, how the information was received and what follow-up information or activities are/were recommended. (Section II.A.10)*

The Town’s Department of Public Works (DPW) staff did not participated in any training in 2015.

Activity	Description	Target Audience	Recommended Follow-Up
N/A	N/A	N/A	N/A

d. Number and nature of reported spills and responses.

	2014	2015	2016	2017	2018
Number of Reported Spills	0	0			

e. Street sweeping frequency and the amount collected and the disposal location(s) for the material. (Section II.F.3)

The Town has approximately 9 miles of urban road section with curb and gutter. These areas are swept once a month from April through September, unless conditions warrant additional cleaning. The Tymco Regenerative Air Street Sweeper was used 27 days with 112 man-hours and 436 miles during the fiscal year. Street sweeping material is hauled to Veolia Environmental Services (ES) Emerald Park Landfill LLC, located in Muskego. Quantities of materials collected are shown in the following table.

Activity	Year				
	2014	2015	2016	2017	2018
Solids Captured (Tons)	124	95			
Man-Hours	121	112			
Lane Miles	444	436			

f. Catch Basin Cleaning frequency and the amount collected, and the disposal location(s) for the material. (Section II.F.2)

All catch basins are cleaned a minimum of twice a year unless rainfall conditions and/or inspections require additional cleaning. The quantity of material collected is shown in the following table.

Removal Activity	Year				
	2014	2015	2016	2017	2018
Catch Basins (Tons)	5	5			
Leaf Collection (Tons)	65	42			
Roadside Ditches (Tons)	40	179			
Structural Controls (Tons)	7	3			
DPW Yard Filter Baskets (lbs)	105	95			
DPW Yard Catch Basins (lbs)	151	150			
Yard Waste (Compacted Yards)	960	1,230			

The Town cleans and inspects all manholes, inlets, and sumps within the storm system twice a year. There are approximately 150 manholes, 496 inlets, and 41 inlets with sumps in the storm system. There were 23 inlet structures repaired in various locations throughout the Town in 2015. The Town also maintains 16 cleanout structures. Catch basins have been logged into quadrant cleaning and inspection reports, which indicate structure number, location, and condition during last inspection. Field inspection sheets are on file at the DPW.

Material collected from catch basin and structural cleaning is hauled to Veolia ES Emerald Park Landfill LLC, located in Muskego. Material removed from roadside construction and ditches is hauled to Certified Products in New Berlin.

g. Municipal yard evaluations, including any retrofits or operation changes.(Section II.F.7)

Materials from street sweeping, catch basin cleaning, leaf collection, public works yard filter baskets and catch basins, and yard waste collection operations are stored in holding areas within the DPW yard. The materials are then loaded and hauled to the appropriate disposal site. The DPW yard is cleaned and monitored on a daily basis. The amount of material collected for each operation can be found in the Removal Activity table in Section *f* above.

There are no changes or updates to the SWPPP as submitted with the 2011 Annual Report.

h. Road salt/de-icing summary, including the amount of salt used, methods, and costs compared to previous years. (Section II.F.5)

The Town maintains approximately 35 miles of roads under the roadway maintenance program. The Town used a 70/30 salt/sand mix for road de-icing through the spring of 2017. The Town monitors road conditions by coordinating with the Police and Sheriff’s Department for current road condition reports and by using the National Weather Service Web site to obtain weather data such as temperature and precipitation. Monthly weather data collected are included in Appendix A.

The Town currently has one dual-axle truck and eight single-axle trucks equipped with plows and tailgate manually controlled flow valve spreaders. Four of the plow trucks are equipped with a 100-gallon liquid dispenser and 1 truck with a 1,000 gallon pre-wet system. Quantities of salt-sand mix and salt brine applied are shown in the following table.

Application	Year				
	2014	2015	2016	2017	2018
Salt (Tons)	562	339			
<i>January 1–June 30</i>	469	255			
<i>July 1–December 31</i>	93	84			
Sand (Tons)	241	144			
<i>January 1–June 30</i>	201	108			
<i>July 1–December 31</i>	40	36			
Brine (Gallons)	8,667	7,490			
Total Cost	\$34,529	29,923			
<i>Percent Cost Increase/(Decrease)</i>	<i>(12%)</i>	<i>(13%)</i>			

Monthly material usage records are included in Appendix B.

i. Any changes to the Pollutant Loading removal rates and status of meeting performance standards. (Section II.G)

No updates to the pollutant loading removal rates were made in 2015. The Town currently meets the 20 percent total suspended solids removal rate for Municipal Separate Storm Sewer Systems (MS4) communities.

- j. *Any other activities that may reduce the amount of pollutants reaching the local wetlands and waterways via the municipal storm sewer system that have measurable results. (This information should be used to assess the success of the programs and to determine if any details should be adjusted to complete a successful implementation.)*

The DPW annually inspects Deer Creek and Poplar Creek in early spring. The amount of material removed from these waterways as a result of the inspection is not quantified. However, the materials removed included trees from windfall, trees cut by beavers, floating garbage, and branches.

The DPW routinely performs maintenance on the nearly 45 miles of grass-lined swales within the Town. Records provided by the DPW indicate 456 hours were spent on ditch maintenance in 2015. The amount of material collected through ditch maintenance can be found in the Removal Activity table in Section f above.

- k. *Number and type of illicit connection found and eliminated. (Section II.C)*

Field screening for the detection of illicit discharges at all major outfalls in accordance with Part II.C was performed on November 2, 2014, during dry weather flow conditions. Field screening documentation is kept on file at the DPW. No illicit discharges were found during the screening.

The Town will continue to inspect all major outfalls once a year. If the Town modifies this inspection schedule, the plan will be submitted for review by the WDNR in accordance with Part II.C before implementation. A summary of the inspections are shown in the following table.

Illicit Discharge Inspection	Year				
	2014	2015	2016	2017	2018
Number of Outfalls Inspected	19	19			
Number of Illicit Discharges Detected	0	0			

- l. *Construction Site Pollutant Control (Section II.D)*

A draft Construction Site Erosion Control ordinance has been prepared for the Town to bring the current ordinance into compliance with Waukesha County and WDNR requirements, a copy is provided in Appendix C. A final copy of the updated ordinance will be provided upon adoption by the Town.

- m. *Post-Construction Storm Water Management (Section II.E)*

A draft Stormwater Management ordinance has been prepared for the Town to bring the current ordinance into compliance with Waukesha County and WDNR requirements, a copy is provided in Appendix C. A final copy of the updated ordinance will be provided upon adoption by the Town.

n. Pollution Prevention (Section II.F)

(1) Inspection, maintenance and inventory of post-construction storm water management facilities.(Section II.F.1)

- a. The Town inspects ditches, outfalls, and sediment basins after rainfall events of 1 inch or more and removes material via a Vac/All MultiPurpose vacuum truck as needed. No inspections were performed on Town-owned detention ponds in 2015.
- b. The Town maintains an inventory of the post-construction storm water management facilities in accordance with Part II.F.1.b of the permit; see Appendix D. In 2015, two wet detention basins, two dry detention basins, and three underground wet storage facilities were constructed as part of three site development projects.

(2) Winter road management plan. (Section II.F.5.h)

The winter road management plan was updated in 2015.

(3) Proper management of leaves (Section II.F.6.)

The Town contracts with a private waste hauler to pick up the residents' leaves and/or brush between April and November. The amount of leaves collected by the private hauler is not tracked. Recycling bag tags are sold at the Town Hall for residents to place on special bags that will be picked up by the contract waste hauler. In addition, the Town schedules 15 drop-off times annually and four curbside pickups for yard waste are scheduled annually to better serve residents. The amount of that yard waste collected can be found in the Removal Activity table in Section *f* above.

In 2015, the DPW collected 42 tons of leaves from riprap-lined ditches, road sweeping, and other storm water drainage facilities.

(4) Volume of used oil collected.

The Town does not have a used oil collection program in place; therefore, no used oil was collected from Town residents. Town residents are directed to take used oil to the Waukesha County Recycling Facility.

The Town's DPW performs regular maintenance on vehicles. Used oil is collected, stored in an outdoor 500-gallon aboveground storage tank, and removed by a private contractor as needed throughout the year. The total amount of oil collected in 2015 was not recorded.

(5) Quantity of hazardous household wastes collected, and if possible, the quantity reused, recycled or disposed of.

The Town does not have a used hazardous waste collection program in place; therefore, no hazardous waste was collected. Town residents are directed to take these items to the Waukesha County Recycling Facility.

(6) Application of lawn and garden fertilizers on municipally controlled properties with pervious surfaces over 5 acres each. (Section II.F.8)

There are no Town-owned properties with over 5 acres of pervious surfaces that receive an application of fertilizer.

(7) Water main break and testing sediment and pollution prevention plan. (Section II.F.10)

A water main break and testing pollution prevention plan has been prepared and is included in Appendix E.

4. A summary of revisions made to the storm water management plan.

No revisions were made to the storm water management plan in 2015.

5. Proposed revisions to the storm water management program, based on a comparison to previous year's efforts, budget, etc.

There are no proposed revisions to the storm water management program except where required by the permit. These revisions are summarized in other sections of this report and appendices. See Item 7 for budget comparisons between actual budget from 2015 and the proposed budget for 2016.

6. A strategy to reduce the pollutants of concern entering local impaired (303(d)) waterways that the copermittee's MS4 system may be the source of. (Beginning March 31, 2011, to be reevaluated and reported annually.)

The Town drains to five of the 303(d) listed local waterways shown in the table in Part II.G of the permit, Deer Creek, Fox River, Frame Park Creek, Poplar Creek, and Spring Creek. Also, a portion of the Town drains to Underwood Creek, a 303(d) listed water via the Dousman Ditch, and flows into the Menomonee River.

To address the impaired waters within the Town limits, the Town will comply with all total maximum daily loads (TMDLs) established for the Upper Fox River and the Menomonee River. Along with TMDL compliance, if future best management practices (BMPs) are necessary, the Town will investigate installation of these structures or practices in areas that will improve the water quality draining to the impaired waterways. The Town may also use public education and events to work with the public to improve water quality draining from private property to impaired waterways. Possible events may include streambank cleanup days along Poplar Creek and Deer Creek, installing rain gardens in impaired waterway watersheds, or educating residents on fertilizer use in areas draining to impaired waterways.

7. A fiscal analysis including annual expenditures and budget for the reporting year and proposed next year, along with the amount spent on the individual programs and efforts compared to previous years.

- 1. The annual expenditures for the previous year with a breakdown of expenses for the major elements of the storm water program.*

2015 Expenditures

	Item	2015 Budget	2015 Actual
Administrative Costs			
	Salary/Benefits/Misc.–Administration	\$53,321	\$53,920
	Salary/Benefits/Misc.–Building Inspection	11,925	13,658
	Salary/Benefits/Misc.–SWU Director	51,111	48,524
	Salary/Benefits/Misc.–SWU	259,237	256,134
	Legal Services	1,500	0
	Engineering Services	50,000	90
	Contracted Professional Services	15,000	12,100
	NR 216–Building Inspection	10,000	4859
	Subtotal	\$452,094	\$389,255
Operations/Maintenance Costs			
	Machinery and Equipment	\$111,740	\$72,678
	SWU Garage–Utility Costs	21,248	12,859
	SWU–Materials/Maintenance	41,000	31,267
	Subtotal	\$173,988	\$116,804
Capital Improvements/Debt Service			
	Engineering	\$0	\$2905
	Debt Service/Expense Costs	0	0
	Construction	0	105,987
	Subtotal	\$0	\$108,893
	Total–2015	\$626,082	\$614,952

- 2. The budget for the current year with an estimated breakdown of the expenses for the major elements of the storm water program.*

2016 Budget

	Item	2016 Budget
Administrative Costs		
	Salary/Benefits/Misc.–Administration	\$57,288
	Salary/Benefits/Misc.–Building Inspection	15,781
	Salary/Benefits/Misc.–SWU Director	52,718
	Salary/Benefits/Misc.–SWU	271,485
	Legal Services	500
	Engineering Services	500
	Contracted Professional Services	15,000
	NR 216–Building Inspection	5000
	Subtotal	\$418,272
Operations/Maintenance Costs		
	Machinery and Equipment	\$83,548
	SWU Garage–Utility Costs	22,499
	SWU–Materials/Maintenance	72,000

	Item	2016 Budget
	Subtotal	\$178,047
Capital Improvements/Debt Service		
	Engineering	\$0
	Debt Service/Expense Costs	0
	Construction	0
	Subtotal	\$0
	Total-2016	\$596,319

	2014	2015	2016	2017	2018
Annual Storm Water Management Cost	\$944,272	\$614,952			
<i>Percent Increase/(Decrease)</i>	<i>56%</i>	<i>(35%)</i>			

8. Identification of water quality improvements or degradation as perceived by the co-permittees. Where degradation is identified, identify why and what actions are being taken to improve the water quality of the receiving water.

In 2015, no areas of degradation or discernible changes in water quality were identified.

9. A duly authorized representative of each community shall sign and certify the annual report and include a statement or resolution that the municipal governing body or delegated representatives have reviewed or been appraised of the content of the annual report. A signed copy of the annual report and other required reports shall be submitted to the WDNR Waukesha Service Center, 141 NW Barstow Street, Room 180, Waukesha, WI 53188.

This annual report was signed by an authorized representative from the Town of Brookfield; a signed statement is included at the beginning of this report.

10. A statement of reapplication for continued coverage under the WPDES permit to retain authorization to discharge storm water through the municipal separate storm sewer system at least 180 days prior to the expiration of this permit

The permit coverage expires November 30, 2019. The Town intends to reapply for continued coverage under the WPDES permit to retain authorization to discharge storm water through the MS4.

APPENDIX A
WINTER SNOW EVENTS LOG AND MONTHLY WEATHER DATA

APPENDIX B
MONTHLY MATERIAL USAGE RECORDS

ROAD SALE SUBSITE INVENTORY RECORD

DT 1874 2002 Trans 277 Wisconsin Administrative Code 277.05(2)(b)

Wisconsin Department of Transportation

1. Site Identification Number 301		2. Site Label 2-67-301-12	3. Report Period January 1st 2015 to December 31st 2015	
1. Site Address (use house number or emergency response number including zip) 655 N. Janacek Rd. Brookfield, WI 53045-6052		5. County Waukesha		6. Site Owner's Name (please print)
7. Name Of Compliance Contact (please print) Jeff Golner		8. Contact's Telephone Number 262-796-3795		9. Contact's Fax Number 262-796-0339
10. Compliance Contact's US Postal Address 655 N. Janacek Rd. Brookfield, WI 53045-6052		11. Wisconsin Address Where Site Records Are Kept 655 N. Janacek Rd. Brookfield, WI 53045-6052		
12. Contact's Internet Email Address dpw@townofbrookfield.com		13. Subsite's Functional Capacity 500 TON		14. Material Stored On This Subsite 30/70 MIX SAND-SALT

15. MONTH	Quantity on hand at start of month	Quantity received at this subsite	Quantity removed from this subsite	Quantity on hand at end of month	This month's data entered by: (Please print full name)
July	509.86 TON	0 TON	0 TON	509.86 TON	JEFFERY G. GOLNER
August	509.86 TON	0 TON	0 TON	509.86 TON	JEFFERY G. GOLNER
September	509.86 TON	0 TON	0 TON	509.86 TON	JEFFERY G. GOLNER
October	509.86 TON	0 TON	0 TON	509.86 TON	JEFFERY G. GOLNER
November	509.86 TON	0 TON	39.6 TON	470.26 TON	JEFFERY G. GOLNER
December	470.26 TON	0 TON	80.4 TON	389.86 TON	JEFFERY G. GOLNER
January	306.97 TON	111.86 TON	184.8 TON	234.03 TON	JEFFERY G. GOLNER
February	234.03 TON	154.81 TON	139.2 TONS	249.64 TONS	JEFFERY G. GOLNER
March	249.64 TONS	299.22 TON	39 TONS	509.86 TONS	JEFFERY G. GOLNER
April	509.86 TONS	0 TON	0 TON	509.86 TONS	JEFFERY G. GOLNER
May	509.86 TONS	0 TON	0 TON	509.86 TONS	JEFFERY G. GOLNER
June	509.86 TONS	0 TON	0 TON	509.86 TONS	JEFFERY G. GOLNER

This form or an **equivalent** record of information and monthly quantities stored at each subsite must be kept on file at this address shown in box 11 for a minimum of six years.

ROAD SALE SUBSITE INVENTORY RECORD

DT 1874 2002 Trans 277 Wisconsin Administrative Code 277.05(2)(b)

Wisconsin Department of Transportation

1. Site Identification Number 301		2. Site Label 2-67-301-12	3. Report Period January 1st 2015 to December 31st 2015	
1. Site Address (use house number or emergency response number including zip) 655 N. Janacek Rd. Brookfield, WI 53045-6052		5. County Waukesha		6. Site Owner's Name (please print)
7. Name Of Compliance Contact (please print) Jeff Golner		8. Contact's Telephone Number 262-796-3795		9. Contact's Fax Number 262-796-0339
10. Compliance Contact's US Postal Address 655 N. Janacek Rd. Brookfield, WI 53045-6052		11. Wisconsin Address Where Site Records Are Kept 655 N. Janacek Rd. Brookfield, WI 53045-6052		
12. Contact's Internet Email Address dpw@townofbrookfield.com		13. Subsite's Functional Capacity 2,000 Gallon		14. Material Stored On This Subsite Salt Brine

15. MONTH	Quantity on hand at start of month	Quantity received at this subsite	Quantity removed from this subsite	Quantity on hand at end of month	This month's data entered by: (Please print full name)
July	1,036 GALLONS	0 GALLONS	0 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER
August	1,036 GALLONS	0 GALLONS	0 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER
September	1,036 GALLONS	0 GALLONS	0 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER
October	1,036 GALLONS	0 GALLONS	0 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER
November	1,036 GALLONS	2,000 GALLONS	1,100 GALLONS	1,936 GALLONS	JEFFERY G. GOLNER
December	1,936 GALLONS	1,954 GALLONS	1,675 GALLONS	2,215 GALLONS	JEFFERY G. GOLNER
January	2,063 GALLONS	2,788 GALLONS	2,760 GALLONS	2,091 GALLONS	JEFFERY G. GOLNER
February	2,091 GALLONS	900 GALLONS	1,680 GALLONS	1,311 GALLONS	JEFFERY G. GOLNER
March	1,311 GALLONS	0 GALLONS	275 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER
April	1,036 GALLONS	0 GALLONS	0 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER
May	1,036 GALLONS	0 GALLONS	0 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER
June	1,036 GALLONS	0 GALLONS	0 GALLONS	1,036 GALLONS	JEFFERY G. GOLNER

This form or an **equivalent** record of information and monthly quantities stored at each subsite must be kept on file at this address shown in box 11 for a minimum of six years.

APPENDIX C
**DRAFT - CONSTRUCTION SITE EROSION CONTROL AND POST-
CONSTRUCTION STORMWATER MANAGEMENT ORDINANCE**

Town of Brookfield

**Storm Water Management
&
Erosion Control Ordinance**

**Chapter 26
Town Code of Ordinances**

Effective Date: _____

Town of Brookfield

Storm Water Management and Erosion Control Ordinance

Chapter 26 - Town of Brookfield Code of Ordinances

Table of Contents

	<u>Page</u>
Sec. 26-326 Authority for Ordinance	4
Sec. 26-327 Findings	4
Sec. 26-328 Purpose and Intent	4
Sec. 26-330 General Administration	5
Sec. 26-331 Jurisdiction	
(a) Jurisdictional Boundaries	5
(b) Newly Annexed Areas	6
Sec. 26-332 Definitions	6
Sec. 26-333 Applicability and Exemptions	
(a) Construction Site Erosion Control	13
(b) Storm Water Management	13
(c) Applicability Exemptions	14
Sec. 26-334 Storm Water Permit Processes, Land Divisions and Zoning	
(a) Permit Required	16
(b) Preliminary Storm Water Review Letter	16
(c) Storm Water Permit Application	18
(d) Certification of Compliance for Final Plat or CSM	18
(e) Fees	19
(f) Application Review Processes	20
Sec. 26-335 Storm Water Permit Requirements	
(a) General Permit Requirements	22
(b) Storm Water Permit Issuance, Duration, Amendments, Transfer and Termination	24
(c) Financial Assurance	25
(d) Construction and Planting Verification	26
(e) Final Inspection	27

Table of Contents (cont.)

	<u>Page</u>
Sec. 26-340 Erosion Control Plan Requirements	
(a) General Erosion Control Plan Requirements and Performance Standards	27
(b) Guiding Principles for Erosion Control	28
(c) Specific Erosion Control Plan Requirements	28
(d) Preliminary Erosion Control Plan Contents	30
(e) Final Erosion Control Plan Contents	31
Sec. 26-341 Storm Water Management Plan Requirements	
(a) General Storm Water Management Plan Requirements	34
(b) Guiding Principles for Storm Water Management	34
(c) Site Plan Map Requirements	35
(d) Specific Storm Water Management Plan Requirements and Performance Standards	37
(e) Technical Exemptions	47
(f) Preliminary Storm Water Management Plan Requirements	49
(g) Final Storm Water Management Plan Requirements	50
Sec. 26-342 Technical Standards and Specifications	
(a) Hydrologic and Hydraulic Computations	53
(b) Design Methods	54
(c) Design Criteria	56
(d) Best Management Practice Design Standards	59
(e) Technical Guidelines	59
(f) Construction Specifications	59
(g) Soil Evaluations	59
(h) Availability	59
(i) Future Revisions or Updates	59
Sec. 26-343 Maintenance of Storm Water BMPs	
(a) Maintenance Agreement Required	60
(b) Agreement Provisions	60
(c) Agreement Form, Approval and Recording	62
(d) Maintenance Responsibilities Prior to a Maintenance Agreement	62
Sec. 26-344 Illicit Discharges	
(a) Prohibitions	62
(b) Exemptions	63
(c) Notice of violation	63
Sec. 26-345 Enforcement	
(a) Prohibited Practices	63
(b) Violations	64
(c) Appeals	67
Sec. 26-346 Validity	
(a) Repeal of Conflicting Ordinances	67
(b) Declaration of Severability	67

Storm Water Management and Erosion Control

Sec. 26-326. Authority for Ordinance.

This ordinance is adopted by the Town of Brookfield Town Board under the authority granted by section 60.627 and Chapter 236 Wisconsin Statutes.

Note: Chapter 236 Wis. Stats. is cited here because this ordinance creates mandatory Town procedures for new land divisions, including, but not limited to "Preliminary Review Letters" and "Certification of Compliance".

Sec. 26-327. Findings

The Town Board finds that uncontrolled storm water runoff and construction site erosion from land development and land disturbing activity can have significant adverse impacts upon local water resources and the health, safety and general welfare of the community, and diminish the public enjoyment and use of natural resources. Specifically, uncontrolled soil erosion and storm water runoff can:

1. Degrade physical stream habitat by increasing stream bank erosion, increasing stream bed scour, diminishing groundwater recharge, diminishing stream base flows and increasing stream temperatures;
2. Diminish the capacity of lakes and streams to support fish, aquatic life, recreational and water supply uses by increasing pollutant loadings of sediment, suspended solids, nutrients, heavy metals, bacteria, pathogens and other urban pollutants;
3. Alter wetland communities by changing wetland hydrology and increasing pollutant loads;
4. Reduce the quality of groundwater by increasing pollutant loading;
5. Threaten public health, safety, property, and general welfare by increasing runoff volumes and peak flood flows and overburdening storm sewers, drainage ways and other storm drainage systems;
6. Undermine floodplain management efforts by increasing the incidence and levels of flooding; and
7. Generate airborne particulate concentrations that are health threatening or may cause other damage to property or the environment.

Sec. 26-328. Purpose and Intent

- (a) The general purpose of this ordinance is to establish regulatory requirements for land development and land disturbing activities aimed to minimize the threats to

public health, safety, welfare, and the natural resources of the Town of Brookfield from construction site erosion and post-construction storm water runoff. Specific purposes are to:

1. Further the maintenance of safe and healthful conditions.
 2. Prevent and control the adverse effects of storm water; prevent and control soil erosion; prevent and control water pollution; protect spawning grounds, fish and aquatic life; establish erosion control and storm water standards for building sites, placement of structures and land uses; and preserve ground cover and scenic beauty.
 3. Control exceedance of the safe capacity of existing drainage facilities and receiving water bodies; prevent undue channel erosion; control increases in the scouring and transportation of particulate matter; and prevent conditions that endanger property.
- (b) Through a single storm water permit process, this ordinance is intended to meet the current construction site erosion control and post-construction storm water management regulatory requirements of Subchapter III of both NR 151 and NR 216 Wis. Admin. Code on the effective date of this ordinance. Nothing in this ordinance prevents the Wisconsin Department of Natural Resources from adopting or enforcing more stringent storm water management requirements in future revisions of Wis. Admin. Code.
- (c) Provisions have also been incorporated to coordinate the storm water permit requirements of this ordinance with other Town zoning and land division regulations.
- (d) The Town Board recognizes that the preferred method of addressing post-construction storm water runoff from land development activities is through the preparation and implementation of regional storm water management plans that cover hydrologic units, such as watersheds or subwatersheds. Accordingly, provisions have been incorporated into this ordinance to allow for the implementation of a regional storm water management plan in lieu of complying with certain on-site storm water management requirements.

Sec. 26-330. General Administration.

The Building Inspector is designated to administer and enforce this ordinance.

Sec. 26-331. Jurisdiction

- (a) **Jurisdictional Boundaries.** This ordinance applies to all lands within the jurisdictional boundaries of Town of Brookfield.

(b) Newly Annexed Areas. If any area within the jurisdiction described in (a) above is annexed by a city or village after the effective date of this ordinance, the provisions of this ordinance apply and shall be enforced after annexation by the annexing city or village unless any of the following occurs:

1. The city or village enacts, administers and enforces an ordinance for the annexed area that complies with the minimum standards established by the Wisconsin Department of Natural Resources and is at least as restrictive as this ordinance, as determined by the Building Inspector; or
2. After annexation, the city or village requests that this ordinance, as it applies to the annexed area, continues to be in effect and enforced by the Building Inspector and the Town Board agrees to enforce the ordinance.

Sec. 26-332. Definitions.

1. **“Applicable review authorities”** means the Town Plan commission, the Town Zoning Administrator, the County Zoning Administrator or the County Park and Planning Commission, depending on the type of project and its location.
2. **“Applicant”** means any person or entity holding fee title to the property or their representative, as herein defined. The applicant shall become the “permit holder” once a permit is issued. The applicant shall sign the initial permit application form in accordance with subs. A through E below, after which the applicant may provide the Building Inspector written authorization for others to serve as the applicant’s representative:
 - A. In the case of a corporation, by a principal executive officer of at least the level of vice president or by the officer’s authorized representative having overall responsibility for the operation of the site for which a permit is sought.
 - B. In the case of a limited liability company, by a member or manager.
 - C. In the case of a partnership, by the general partner.
 - D. In the case of a sole proprietorship, by the proprietor.
 - E. For a unit of government, by a principal executive officer, ranking elected official or other duly authorized representative.
3. **“Best management practice” (or “BMP”)** means structural and non-structural measures, practices, techniques or devices employed to avoid or minimize sediment or other pollutants carried in runoff.

4. **“Common plan of development”** means all lands included within the boundary of a certified survey map or subdivision plat created for the purpose of development or sale of property where integrated, multiple, separate and distinct land developing activity may take place at different times by future owners.
5. **“County mapping standards”** means that the maps are drawn to national map accuracy standards using the Wisconsin State Plane Coordinate System, Wisconsin South Zone, North American Datum 1927 (NAD-27) and National Geodetic Vertical Datum of 1929 (NGVD-29).
6. **“Design storm”** means a hypothetical depth of rainfall that would occur for the stated return frequency (i.e. once every 2 years or 10 years), duration (i.e 24-hours) and timing of distribution (i.e. type II). All values are based on the historical rainfall records for the area. Design storms used in this ordinance are summarized in sec. 26-342(a).
7. **“Dewatering”** means the removal of trapped water from a construction site to allow land development or utility installation activities to occur.
8. **“Erosion”** means the process of detachment, transport and deposition of soil, sediment or rock fragments by action of water, wind, ice or gravity.
9. **“Effective infiltration area”** means the area of the infiltration system that is used exclusively to infiltrate runoff and does not include the area used for site access, berms or pretreatment.
10. **“Environmental corridor (primary and secondary)”** means a composite of the best individual elements of the natural resource base including surface water, streams, and rivers and their associated floodlands and shorelands; woodlands, wetlands and wildlife habitat; areas of ground water discharge and recharge; organic soils, rugged terrain and high relief topography; and significant geological formations and physiographic features. A description of the process of defining and delineating Environmental Corridors is set forth in the Southeastern Wisconsin Regional Planning Commission's Technical Record, Volume 4, No. 2 and is incorporated herein by reference.
11. **“Environmentally sensitive area”** means any area that, due to the natural resources present or the lack of filtering capacity, is more susceptible to the adverse impacts of sediment and other pollutants associated with erosion and urban runoff. Examples include environmental corridors, direct hydrologic connections to lakes, streams, wetlands, groundwater or other water resources, or very coarse or shallow soils above groundwater or bedrock.

12. **“Filtering layer”** means soil that has at least a 3-foot deep layer with at least 20% that passes through a #200 sieve (fines); or at least a 5-foot deep layer with at least 10% that passes through a #200 sieve (fines); or another medium exists with an equivalent level of protection, as determined by the Building Inspector.
13. **“Final plat”** means a map of a proposed condominium or subdivision to be recorded with the Waukesha County Register of Deeds pursuant Wisconsin Statutes.
14. **“GIS system of Waukesha County”** means the computerized mapping system that Waukesha County makes available to the general public over the Internet.
15. **“Groundwater recharge areas”** means lands identified in a document published by the Southeastern Wisconsin Regional Planning Commission as groundwater recharge areas; or where, prior to any land disturbing or land development activity, precipitation or runoff could only leave the area by infiltrating the ground, thereby recharging the groundwater.
16. **“Illicit connection”** means any drain or conveyance, whether on the surface or subsurface, which allows an illegal non-storm water discharge to enter the storm drain system, including but not limited to: sewage, process wastewater and wash water, any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been allowed, permitted, or approved by a government agency, prior to the adoption of this ordinance.
17. **“Impervious surface”** means an area that releases all or a large portion of the precipitation that falls on it, except for frozen soil. Conventional rooftops and asphalt or concrete sidewalks, driveways, parking lots and streets are typical examples of impervious surfaces. For purposes of this ordinance, typical gravel driveways and other examples listed shall be considered impervious unless specifically designed to encourage infiltration or storage of runoff.
18. **“Impracticable”** means that complying with a specific requirement would cause undue economic hardship and that special conditions exist that are beyond the control of the applicant and would prevent compliance.
19. **“In-fill development”** means land development that occurs where there was no previous land development and is surrounded by other existing land development;
20. **“Infiltration”** means the entry of precipitation or runoff into or through the soil.

21. **“Infiltration system(s)”** 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.
22. **“Karst features”** 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.
23. **“Land development activity” or “land development”** means any construction related activity that may ultimately result in the addition of impervious surfaces, such as the construction of buildings, roads, parking lots and other structures.
24. **“Land disturbing activity” (or “disturbance”)** means any man-made alteration of the land surface that may result in a change in the topography or existing vegetative or non-vegetative soil cover, or may expose soil and lead to an increase in soil erosion and movement of sediment. Land disturbing activity includes clearing and grubbing for future land development, excavating, filling, grading, building construction or demolition, and pit trench dewatering.
25. **“Land division” means the creation from one parcel of two or more parcels or building sites where such creation occurs at one time or through the successive partition within a 5-year period.**
26. **“Maximum Extent Practicable or MEP”** means an acceptable level of implementing best management practices to achieve a performance standard specified in this ordinance, as determined by the Building Inspector. In determining MEP, the Building Inspector shall take 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.
27. **“Navigable”** has the meaning given in the Waukesha County Shoreland and Floodland Protection Ordinance.
28. **“Nonmetallic mining”** has the meaning specified under s. 295.11(3) Wisconsin Statutes
29. **“Off-site BMP”** means best management practice(s) that are located outside of the boundaries of the site covered by a permit application. Off-

site BMPs are usually installed as part of a regional storm water management plan approved by a local government.

30. **Ordinary high water mark (OHWM)**” has the meaning given in s. NR115 Wis. Admin. Code.
31. **“Planned land use”** means the land use designated in the latest version of the Town of Brookfield land use plan.
32. **“Plat”** means a map of a proposed condominium or subdivision.
33. **“Pollutant”**, as per s. 283.01(13) Wisconsin Statutes, means any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, sewage sludge, munitions, chemical wastes, biological materials, radioactive substance, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.
34. **“Pollution”**, as per s. 283.01(10) Wisconsin Statutes, means man-made or man-induced alteration of the chemical, physical, biological or radiological integrity of water.
35. **“Preliminary plat”** means a map showing the salient features of a proposed condominium or subdivision submitted to an approving authority for purposes of preliminary consideration.
36. **“Preventive action limit”** has the meaning given in s. NR 260.05(17), Wis. Admin. Code.
37. **“Publicly funded” means a land development, such as a public road or municipal building, that is being funded solely by a unit of government. It does not include new roads or other structures built with private funds, or a combination of public and private funds, and subsequently dedicated to a unit of government.**
38. **“Redevelopment”** means land development that replaces previous land development of similar impervious conditions.
39. **“Regional storm water management plan”** means a planning document, adopted by a local unit of government, that coordinates storm water management activities for an entire drainage area or watershed, including future land development activities within the watershed. The plan may prescribe the use of BMPs for individual development sites and for selected points within the watershed to meet the goals and objectives of the plan.
40. **“Regulatory agency”** means a public agency recognized as having the legal authority to review and approve erosion control and storm water management plans and enforce their implementation, with requirements at least as restrictive as this ordinance.

41. **“Responsible party”** means any person or entity holding fee title to the property or acting as the owners representative, including any person, firm, corporation or other entity performing services, contracted, subcontracted or obligated by other agreement to design, implement, inspect, verify or maintain the BMPs and other approved elements of erosion control and storm water plans and permits under this ordinance.
42. **“Road”** as used in this ordinance, means any access drive that serves more than two (2) residences or businesses.
43. **“Runoff”** means water from rain, snow or ice melt, or dewatering that moves over the land surface via sheet or channelized flow.
44. **“Seasonal high water table”** means the upper limit of the zone of soil saturation caused by underlying groundwater at its highest level based on soil and site evaluations in accordance with technical standards under sec. 26-342.
45. **“Shoreland”** has the meaning given in the Waukesha County Shoreland and Floodland Protection Ordinance.
46. **“Site”** means the entire area included in the legal description of which the land disturbing or land development activity will occur.
47. **“Stabilized”** means that all land disturbing activities are completed and that a uniform, perennial vegetative cover has been established on at least 70% of the soil surface or other surfacing material is in place and the risk of further soil erosion is minimal, as determined by the Building Inspector.
48. **“Storm drainage system”** means a publicly-owned facility by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.
49. **“Storm water”** has the same meaning as the term “runoff”.
50. **“Storm water BMP”** means any best management practice that is designed to collect or manage the quantity or quality of storm water runoff for an indefinite time period. This term is a subset of the term “best management practice” and distinct in that they require long-term maintenance. Some examples include, but are not limited to: wet or dry detention basin, infiltration trench or basin, bio-retention basin, stilling basin, green roof, filter strip, artificial wetland, or any combination of these or other permanent storm water management practices, as determined by the Building Inspector.

51. **“Storm water permit”** means a written authorization made by the Building Inspector to the applicant to conduct land disturbing or land development activities in accordance with the requirements of this ordinance. A storm water permit regulates both construction site erosion and post-construction storm water runoff from a site.
52. **“Subdivision”** means a division of a lot, parcel or tract of land by the owner thereof or the owner’s agent for the purpose of sale or of building development, where:
 - a. The act of division creates 5 acres or more parcels or building sites of 1½ acres each or less in area; or
 - b. Five or more parcels or building sites of 1½ acres each or less in area are created by successive divisions within a period of five years.
53. **“Technical standard”** means a document that specifies design, predicted performance and operation and maintenance requirements for a material, device or method.
54. **“Top of channel”** means an edge, or point on the landscape, commencing 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% continually for at least 50 feet. If the slope of the land is 12% 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.
55. **“Town”** means the Town of Brookfield Town Board.
56. **“Building Inspector”** means the person or firm designated by the Town to represent the Town on matters related to the implementation and enforcement of this ordinance.
57. **“Town plan commission”** means the Town plan commission established under village powers pursuant to Chapter 62 Wisconsin Statutes.
58. **“Utility”** means a wire, pipe, tube or other conduit designed to distribute or collect a product or service, including but not limited to electricity, natural gas, oil, telecommunications, drinking water, storm water, sewage, or any combination of these items.
59. **“Warm season and wetland plantings”** means seed or plant stock that are native to a prairie or wetland setting. These types of plantings usually take a couple of years to get established and require diligent removal of invasive species during this time. Upon maturity, warm season plants generally have a deep root system, which enhances infiltration.

60. **“Waters of the state”** has the meaning given in s. 281.01 (18), Wisconsin Statutes.
61. **“Wetlands”** means an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions.
62. **“Woodland”** means an area where a grouping of 10 or more trees exist that have trunk diameters of at least 4 inches at four feet above the ground surface. The boundaries of a woodland shall be defined by the canopy, commonly referred to as the “drip line”.
63. **“Working day”** means any day the office of the Building Inspector is routinely and customarily open for business, and does not include Saturday, Sunday and any official Town holidays.

Sec. 26-333. Applicability and Exemptions

(a) Construction Site Erosion Control. Unless otherwise exempted under sub. (c) below, a storm water permit under sec. 26-334 shall be required and all erosion control and other provisions of this ordinance shall apply to all proposed land disturbing activity that meets any of the following:

1. Disturbs a total land surface area of 3,000 square feet or more; or
2. Involves excavation or filling, or a combination of excavation and filling, in excess of 400 cubic yards of material; or
3. Involves the laying, repairing, replacing, or enlarging of an underground utility, pipe or other facility, or the disturbance of road ditch, grass swale or other open channel for a distance of 300 feet or more; or
4. Is a land disturbing activity, regardless of size, that the Building Inspector determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion control standard set forth in this ordinance.

(b) Storm Water Management. Unless otherwise exempted in this ordinance, a storm water permit under sec. 26-334 shall be required and all storm water management and other provisions of this ordinance shall apply to all proposed land development activity that meet any of the following:

1. Is a subdivision plat; or
2. Is a certified survey map or any other land development activity that may ultimately result in 0.5 acres or greater of new impervious surfaces; including smaller individual sites that are part of a common plan of development that may be constructed at different times, or

3. Involves the construction of any new public or private road; or
4. Is a land development activity, regardless of size, that the Building Inspector determines is likely to cause an adverse impact to an environmentally sensitive area or other property. For purposes of this section, adverse impacts shall include causing chronic wetness on other property due to reoccurring discharges of storm water, or violating any other storm water management standard set forth in this ordinance.

Note: *The Town Plan commission or Town Zoning Administrator may require a review and determination of sub. (a)4. or (b)4. above by the Town Engineer as a condition of other zoning approvals.*

(c) Applicability Exemptions.

1. Exempt From All Requirements. The following activities shall be exempt from all of the requirements of this ordinance:
 - A. Land disturbing activities directly involved in the planting, growing and harvesting of any plant grown for human or livestock consumption and pasturing or yarding of livestock, including sod farms and tree nurseries.
 - B. Land development and land disturbing activities exempted by state or federal law, including highway construction and other projects conducted by a state agency, as defined under s. 227.01 (1), Wisconsin Statutes, or under a memorandum of understanding entered into under s. 281.33 (2), Wisconsin Statutes. To recognize an exemption under this paragraph, the Building Inspector may require documentation of the person(s) and regulatory agency charged with enforcing erosion control and storm water management for the project.
 - C. Land disturbing activity directly involved in the installation and maintenance of private on-site waste disposal systems, as regulated under this Chapter.
 - D. If another regulatory agency is enforcing erosion control and storm water management provisions that the Building Inspector determines are at least as restrictive as those contained in this ordinance, the applicant may request an exemption from any or all provisions of this ordinance. An applicant must apply for this exemption on a form provided by the Building Inspector for that purpose. There will be a fee associated with reviewing the request in accordance with sec. 26-334(e). Based upon the scope of the requested exemption, the Building Inspector may require the applicant to submit documentation relating to the project, including any or all of the following:

- (i) A copy of the proposed plans certified as approved by a regulatory agency. Said plans shall also be stamped by a professional engineer licensed in Wisconsin, stating that the design of all best management practices comply with this ordinance and all applicable technical standards.
- (ii) Contact information for the applicant or for person(s) representing the applicant and charged with overseeing the implementation of the approved plans, including certifying construction.
- (iii) A copy of the permit issued by the regulatory agency and contact information for the person(s) charged with permit enforcement duties.
- (iv) A copy of design summaries, as-built documents and construction certification pursuant to sec. 26-335(d) for all storm water BMPs constructed as part of the project.
- (v) A copy of a recorded maintenance agreement in accordance with sec. 26-343 for all storm water management facilities constructed as part of the project.
- (vi) Other items that the Building Inspector determines are necessary to ensure compliance equal to the requirements of this ordinance.

Note: Cooperative working agreements may be used to implement the provisions of this subsection.

2. Exempt From Erosion Control Requirements Only. The following land disturbing activities shall be exempt from the erosion control provisions of sub. (a) above:

- A. Those activities the Building Inspector determines are required for the construction of individual one and two family residential buildings under COM. 21.125 Wis. Admin. Code.

Note: The Wisconsin Uniform Dwelling Code (COM 21), which is also enforced by the Town, includes erosion control requirements that apply statewide.

- B. Nonmetallic mining activities that are covered under a nonmetallic mining reclamation permit under NR 135 Wis. Admin. Code.
- C. Placement of underground pipe or other utility that is plowed or bored into the ground outside areas of channelized runoff.

3. Other Exemptions. The Building Inspector may exempt a site or a portion of a site from meeting certain technical requirements of this ordinance in accordance with sec. 26-341(e).

Note: Cooperative working agreements may be used to administer this section for routine road maintenance and emergency utility work.

Sec. 26-334. Storm Water Permit Processes, Land Divisions and Zoning

(a) Permit Required. A storm water permit under sub. (c) shall be obtained before any person commences a land disturbing or land development activity, pursuant to the applicability and exemption provisions of Sec. 26-333. Based upon the scope of the project, a preliminary review letter under sub. (b) below and certification of compliance under sub. (d) below will also be required as part of the permit process.

(b) Preliminary Storm Water Review Letter.

1. Purpose and Intent. A preliminary storm water review letter is prepared by the Building Inspector to ensure that early site-planning for any new development accounts for compliance with this ordinance. Preliminary storm water planning will help resolve spatial and soils issues early in the site-planning phase, preventing a conflict with other permit requirements or the recording of land divisions. This will also assist the applicant in obtaining other permits or zoning approvals prior to finalizing detailed construction plans. A storm water permit is required prior to the start of any proposed land disturbing or land development activity.
2. Applicability and Requirements. A. A preliminary storm water review letter from the Building Inspector is required prior to the approval of a preliminary plat, certified survey map, site plan, conditional use permit, zoning permit or zoning amendment by the Town Plan commission or Town Zoning Administrator for any proposed land disturbing or land development activity that meets one or more of the following:
 - (i) Disturbs a total land surface area of 1 acre or more;
 - (ii) Involves the construction of a new public or private road of any length;
 - (iii) Ultimately results in 0.5 acres or greater of new impervious surfaces, including smaller individual sites that are part of a common plan of development; or
 - (iv) Other land disturbing or land development activities, as determined by the Building Inspector under sec. 26-333 (a)4. or (b)4. above.
- B. All project approvals described in sub. A. above shall be subject to the recommendations, requirements or objections contained in a preliminary review letter from the Building Inspector, which may include requiring certification of compliance under sub. (d) below.

- C. For preliminary plats, a Town interdepartmental review meeting shall not be scheduled prior to 10 working days after the application submittal date for a preliminary review letter in accordance with sub. (f)1. below.

Note: *It is recommended that subdivisions and other projects that may result in 0.5 acres of new impervious surface go through a concept-planning phase, including meeting with Building Inspector and Town zoning staff, prior to submitting a preliminary plat or CSM.*

3. Preliminary Review Letter Application.

- A. To request a preliminary review letter, the applicant shall submit a complete application to the Town, which shall include all of the following:
 - (i) A completed and signed application on a form provided by the Town for that purpose;
 - (ii) The application fee, unless exempted under sub. (e) below;
 - (iii) A site plan map in accordance with sec. 26-341(c), which may be in a preliminary stage as prepared for zoning amendments and certified survey maps;
 - (iv) A preliminary erosion control plan in accordance with sec. 26-340(d);
 - (v) A preliminary storm water management plan in accordance with sec. 26-341(f) for those sites that propose to add a new road or add 0.5 acres or greater of impervious surfaces, including smaller individual sites that are part of a common plan of development; and
 - (vi) A preliminary maintenance agreement for all storm water BMP's proposed for the site.
- B. The Building Inspector may waive the requirement for a preliminary erosion control or preliminary storm water management plan under sub. A above if the Building Inspector determines that it is not necessary to ensure compliance with this ordinance based on the site map submitted. However, all items required for a storm water permit shall apply.
- C. The Building Inspector may require map items listed above to be submitted in a digital form, if available, including georeferencing map data to the public land survey system in accordance with county mapping standards.
- D. Review procedures for a preliminary review letter application shall be in accordance with sub. (f)1. below.

(c) Storm Water Permit Application.

1. To request a storm water permit under this ordinance, the applicant shall submit a complete application to the Town, which shall include all of the following:
 - A. A completed and signed application on a form provided by the Town for that purpose;
 - B. The applicable fee(s), unless exempted under sub. (e) below;
 - C. A site plan map in accordance with sec. 26-341(c);
 - D. A final erosion control plan in accordance with sec. 26-340(e);
 - E. A final storm water management plan in accordance with sec. 26-341(g) for those land development activities that meet any of the applicability criteria of sec. 26-333 (b), and the documentation required under sec. 26-341(e)2.D. related to a off-site BMP's, if applicable;
 - F. A maintenance agreement in accordance with sec. 26-343; and
 - G. A financial assurance, in accordance with sec. 26-335(c).
2. The Building Inspector may require map items listed above to be submitted in a digital form, if available, including georeferencing map data to the public land survey system in accordance with county mapping standards.
3. Review procedures for a storm water permit application shall be in accordance with sub. (f) below.

Note: A permit application form under sub. A. above may not be necessary if the applicant has already submitted an application for a Preliminary Review Letter.

(d) Certification of Compliance for Final Plat or CSM.

1. Applicability. The Building Inspector shall certify compliance with this section prior to the Town Plan Commission approving any final plat or certified survey map that meets one of the following:
 - A. The site plan may ultimately result in 0.5 acres or greater of new impervious surfaces, including smaller individual sites that are part of a common plan of development;
 - B. Includes the construction of any new public or private road; or

- C. Other land development activities as determined by the Building Inspector under sub. (b)2.B. above.

Note: *The Town Plan Commission or Zoning Administrator may require certification of compliance under this subsection as a condition of other zoning approvals.*

- 2. Review Items. To obtain certification of compliance, the applicant shall submit a final plat or CSM to the Building Inspector for review. The Building Inspector shall review submittals for compliance with all of the following items based on preliminary or final site plans and storm water management plans:
 - A. Location and size of drainage easements and other areas set aside for storm water management, and the associated language describing use restrictions;
 - B. Setback requirements from wells, structures, steep slopes, road right-of-ways and other items related to the location of storm water management facilities;
 - C. Location of access drives and associated easements and use restrictions to ensure adequate access to storm water management facilities for future maintenance;
 - D. Utility easements as they may affect the grading and erosion control plans;
 - E. The final maintenance agreement in accordance with sec. 26-343 for all storm water BMP's;
 - F. Site drainage requirements under sec. 26-341(d)6.]; and
 - G. Other items that the Building Inspector determines are necessary to achieve compliance with this ordinance.
- 3. Review Process. Review procedures for certification of compliance for final plat or CSM shall be as described in sub. (f)1. below.

Note: *To avoid disapproval of the final plat, it is recommended that a final storm water management plan be approved by the Building Inspector prior to submittal of the final plat.*

(e) Fees. Application and review fees under this ordinance shall be in accordance with the following:

- 1. All fees shall be established by the Town and approved through the annual budget process.
- 2. Fee amounts shall not exceed the actual and direct Building Inspector costs of administering this ordinance.
- 3. A fee schedule shall be available for review and public distribution.

4. All publicly funded land disturbing and land development activities within the jurisdiction of this ordinance shall be exempt from the fees under this section.

(f) Application Review Processes.

1. Preliminary Storm Water Review Letter and Certification of Compliance.
Upon submittal of a complete application under sub. (b) above or a final plat or CSM under sub. (d) above, the applicant is authorizing the Building Inspector to enter upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:
 - A. The Building Inspector shall have 10 working days from the date the Town receives the application to issue a review letter to the applicable review authorities and the applicant based on the requirements of this ordinance.
 - B. If within the 10 working days, the Building Inspector determines that the application is not complete or requests additional information from the applicant or another source (such as another regulatory agency), the Building Inspector shall have 10 working days from the date additional information is received to issue a review letter. The Building Inspector shall inform the applicant and the applicable review authorities when additional information is requested from another source.
 - C. If the Building Inspector does not notify the applicant of missing information or issue a review letter within the 10 working days, the applicant may continue pursuing other applicable approvals or deed recording without the preliminary storm water review letter or certification of compliance.
 - D. If within the 10 working days, the Building Inspector notifies the applicable review authorities that the application under sub. (b)3. above is not complete, information has been requested from another source, or recommended changes or objections to the application need to be addressed before other approvals can proceed, then the applicable review authorities may:
 - (i) At the request of the applicant, grant an extension to the review period, if needed, to allow more time for the Building Inspector review process to be completed or to address Building Inspector recommendations, requirements or objections to the application; or
 - (ii) Disapprove the application, plat or CSM.
2. Storm Water Permit < 1 acre Land Disturbance and Applicability Exemptions.

Upon submittal of a complete permit application under sub. (c) above or applicability exemption application under sec. 26-333(c), the applicant is authorizing the Building Inspector to enter upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:

- A. Within 10 working days from the date the Town receives the application, the Building Inspector shall inform the applicant whether the application materials are approved or disapproved based on the requirements of this ordinance.
- B. If all requirements of this ordinance have been met through the application, the Building Inspector shall approve the application and issue a permit or exemption. If all requirements of this ordinance have not been met, the Building Inspector shall state in writing the reasons for disapproval.
- C. If within the 10 working days, the Building Inspector determines that the application is not complete or requests additional information from the applicant or another source (such as another regulatory agency), the Building Inspector shall have 10 working days from the date the additional information is received to review and act on the application. The Building Inspector shall inform the applicant when additional information is requested from another source.
- D. Failure of the Building Inspector to inform the applicant of missing information or of a decision within 10 working days shall be deemed to mean approval of the application and the applicant may proceed as if a permit had been issued.

3. Storm Water Permit \geq 1 Acre Land Disturbance and Technical Exemptions.

Upon submittal of a complete application under sub. (c) above or a technical exemption application under sec. 26-341(e), the applicant is authorizing the Town to enter upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:

- A. Within 20 working days from the date the Town receives the application, the Building Inspector shall inform the applicant whether the application materials are approved or disapproved based on the requirements of this ordinance.
- B. If all requirements of this ordinance have been met through the application, the Building Inspector shall approve the application and issue a permit. If all requirements of this ordinance have not been met, the Building Inspector shall state in writing the reasons for disapproval.

- C. If within the 20 working days, the Building Inspector determines that the application is not complete or requests additional information from the applicant or another source (such as another regulatory agency), the Building Inspector shall have 20 working days from the date the additional information is received to review and act on the application. The Building Inspector shall inform the applicant when additional information is requested.
- D. Failure of the Building Inspector to inform the applicant of missing information or of a decision within the 20 working days shall be deemed to mean approval of the application and the applicant may proceed as if a permit had been issued.

Sec. 26-335. Storm Water Permit Requirements.

(a) General Permit Requirements. Storm water permits shall be subject to all of the requirements of this section. Violation of any permit requirement shall cause the permit holder and any other responsible party to be subject to enforcement action under sec. 26-345. Upon issuance of a storm water permit, the permit holder and any other responsible party shall be deemed to have accepted these requirements. General requirements include all of the following:

1. Other Permits. Compliance with a storm water permit does not relieve the permit holder or other responsible party of the responsibility to comply with other applicable federal, state, and local laws and regulations. The Building Inspector may require the applicant to obtain other permits or plan approvals prior to issuing a storm water permit.
2. Approved Plans. All best management practices shall be installed and maintained in accordance with approved plans and construction schedules. A copy of the approved plans shall be kept at the construction site at all times during normal business hours.
3. Plan Modifications. The Building Inspector shall be notified of any significant modifications proposed to be made to the approved plans. The Building Inspector may require proposed changes to be submitted for review prior to incorporation into the approved plans or implementation. Any modifications made during plan implementation without prior approval by the project engineer under sub. 6 below and the Building Inspector are subject to enforcement action.
4. Notification. The Building Inspector shall be notified at least 2 working days before commencing any work in conjunction with approved plans. The Building Inspector shall also be notified of proposed plan modifications under sub. 3 above, and within 1 working day of completing construction of a storm water BMP. The Building Inspector may require additional notification according to a schedule established by the Building

Inspector so that practice installations can be inspected during construction.

5. Building Inspector Access. The Building Inspector or its designee shall be permitted access to the site for the purpose of inspecting the property for compliance with the approved plans and other permit requirements.
6. Project Engineer/Landscape Architect. For those sites required to prepare a storm water management plan under 26-333(b), the permit holder shall provide an engineer licensed in the state of Wisconsin to be responsible for achieving compliance with approved construction plans, including the erosion control plan, storm water management plan, implementation of the approved inspection plan and verification of construction in accordance with sub. (d) below. If warm season or wetland plantings are involved, the permit holder shall also provide a landscape architect or other qualified professional to oversee and verify the planting process and its successful establishment.
7. Inspection Log. The permit holder shall provide a qualified professional to conduct inspections and maintain an inspection log for the site. All best management practices shall be inspected within 24 hours after each rain event of 0.5 inch or more that results in runoff, or at least once each week. The inspection log shall include the name of the inspector, the date and time of inspection, a description of the present phase of construction, the findings of the inspection, including an assessment of the condition of erosion and sediment control measures and the installation of storm water management BMPs, and any action needed or taken to comply with this ordinance. The inspection log shall also include a record of BMP maintenance and repairs conducted under subs. 8 and 9 below. The permit holder shall maintain a copy of the inspection log at the construction site or via the Internet, and shall notify the Building Inspector of the method of availability upon permit issuance. If the inspection log is maintained on site, the Building Inspector may view or obtain a copy at any time during normal business hours until permit termination under sub. (b) below. If the inspection log is made available via the Internet, the permit holder shall notify the Building Inspector of the appropriate Internet address and any applicable access codes, and shall maintain the availability of the log until permit termination under sub. (b) below.
8. BMP Maintenance. The permit holder shall maintain and repair all best management practices within 24 hours of inspection, or upon notification by the Building Inspector, unless the Building Inspector approves a longer period due to weather conditions. All BMP maintenance shall be in accordance with approved plans and applicable technical standards until the site is stabilized and a permit termination letter is issued under sub. (b) below. The permit holder, upon approval by the Building Inspector, shall remove all temporary erosion control practices such as silt fence. The permit holder, in accordance with approved plans and applicable technical

standards, shall maintain permanent storm water management practices until maintenance responsibility is transferred to another party or unit of government pursuant to the recorded maintenance agreement.

9. Other Repairs. The permit holder shall be responsible for any damage to adjoining properties, municipal facilities or drainage ways caused by erosion, siltation, runoff, or equipment tracking. The Building Inspector may order immediate repairs or clean-up within road right-of-ways or other public lands if the Building Inspector determines that such damage is caused by activities regulated by a permit under this ordinance. With the approval of the landowner, the Building Inspector may also order repairs or clean-up on other affected property.
10. Emergency Work. The permit holder authorizes the Building Inspector, in accordance with the enforcement procedures under sec. 26-345, to perform any work or operations necessary to bring erosion control or storm water management practices into conformance with the approved plans and consents to charging such costs against the financial assurance pursuant to sub. (c) below or to a special assessment or charge against the property as authorized under subch. VII of ch. 66, Wisconsin Statutes
11. Permit Display. The permit holder shall display the storm water permit in a manner that can be seen from the nearest public road and shall protect it from damage from weather and construction activities until permit termination under sub. (b) below.
12. Other Requirements. The Building Inspector may include other permit requirements that the Building Inspector determines are necessary to ensure compliance with this ordinance

(b) Storm Water Permit Issuance, Duration, Amendments, Transfer and Termination.

1. Permit issuance. The Building Inspector shall issue a permit to the applicant after verifying that all applicable conditions of this ordinance and possibly other related permits have been met, including the submittal of contact information for all responsible parties and the submittal of the financial assurance under sub. (c) below. The Building Inspector may delay issuance of a storm water permit if the Building Inspector determines that the proposed construction timelines and best management practices will not comply with the erosion control plan requirements under sec. 26-340 or the purposes of the ordinance under sec. 26-328, including proposed late season new road construction with grass swales.

Note: *The Town has determined that it is difficult and/or costly to avoid adverse impacts to other property and the environment to construct new roads with grass swales after standard seeding deadlines for cool season grasses.*

2. Permit duration. The Building Inspector shall establish an expiration date for all storm water permits based on the construction schedules in the approved erosion control and storm water management plans. The applicant shall notify the Building Inspector of any changes to the proposed schedule prior to permit issuance.
3. Permit amendments. The Building Inspector may amend any terms of a storm water permit, including extending the permit expiration date, if the Building Inspector determines it is necessary to ensure compliance with this ordinance. The applicant shall request an amendment to a storm water permit at least 2 weeks before permit expiration on a form provided by the Building Inspector for that purpose and shall pay the corresponding fee. The Building Inspector may require additional erosion control or storm water management measures as a condition of granting a permit amendment.
4. Permit transfer. The Building Inspector may transfer a storm water permit issued under this ordinance to a new applicant upon a written request from the applicant and payment of the corresponding fee. The permit transfer shall not take effect until the Building Inspector verifies in writing that the new applicant has satisfied all conditions of this ordinance, including an updated list of responsible parties and the submittal of a new financial assurance under sub. (c) below. Upon foreclosure or other regulatory transfer of the property, the permit shall automatically transfer to the new owner.
5. Permit termination. The Building Inspector shall issue a permit termination letter to the permit holder upon releasing the financial assurance under sub. (c) below, which shall serve as documentation that all conditions of this ordinance have been satisfied and the permit has been terminated. A copy of this letter shall also be sent to the Wisconsin Department of Natural Resources and shall serve as the "Notice of Termination" under s.s. NR 216.55 Wis. Admin. Code.

(c) Financial Assurance.

1. Purpose. The Town may require the applicant to submit a financial assurance to ensure compliance with the approved erosion control and storm water management plans and other storm water permit requirements.
2. Type and Authority. The Town shall determine the acceptable type and form of financial assurance, which may include cash, a bond, an escrow account or irrevocable letter of credit. The Town shall, upon written notice to the permit holder, be authorized to use the funds to complete activities required in the approved plans or this ordinance if the permit holder or other responsible party defaults or does not properly implement the requirements.
3. Amount. The amount of the financial assurance shall be determined by the Building Inspector and shall not exceed 110% of the estimated cost of

completing the approved erosion control and storm water management plans.

4. Exemption. Publicly funded land disturbing or land development activities shall be exempt from providing a financial assurance.
5. Security. The Town shall provide the permit holder or other responsible party a written statement outlining the purpose of the financial assurance, the applicable amount and type received and all of the conditions for release.
6. Conditions for Release. The Town shall release the financial assurance, and issue a termination letter in accordance with sub, (b)5. above, only after determining full compliance with the permit and this ordinance, including the following:
 - A. Accepting an “as-built” survey certified pursuant to sub. (d)1. below,
 - B. Accepting verification of construction, and plantings if applicable, pursuant to sub. (d)2. below;
 - C. Completing a satisfactory final inspection pursuant to sub (e) below;
 - D. Receiving a copy of the recorded maintenance agreement pursuant to sec. 26-343 of this ordinance.
7. Partial Releases. The permit holder may apply for a partial release of the financial assurance based on the completion or partial completion of various construction components or satisfaction of individual requirements noted above.
8. Amounts Withheld. The Town shall withhold from the financial assurance amount released to the permit holder any costs incurred by the Town to complete installation or maintenance of best management practices through enforcement action or prior to the transfer of maintenance responsibilities through an approved maintenance agreement, or other unpaid fees or costs incurred by the Town associated with the enforcement of this ordinance.
9. Other Financial Assurances. The financial assurance provisions of this ordinance shall be in addition to any other applicable financial assurance requirements.

(d) Construction and Planting Verification.

1. As-built Survey. To ensure compliance with this ordinance and to serve as a basis for the engineering verification under sub. 2 below, an as-built survey shall be completed in accordance with Town standards and certified as accurate by a registered land surveyor or an engineer licensed in the State of Wisconsin. As-built plans shall be submitted to the Building Inspector for all storm water management BMPs, bridges and culverts pursuant to sec. 26-341(d).6.D. below, and other permanent best management practices or practice components as deemed necessary by the Building Inspector to

ensure its long-term maintenance. The Building Inspector may require a digital submittal of the as-built survey, in accordance with Town standards.

2. Verification. A professional engineer licensed in the State of Wisconsin shall verify, in accordance with Town standards, that the engineer has successfully completed all site inspections outlined in the approved plans and that the construction of all storm water management BMPs, as determined by the Building Inspector, comply with the approved plans and applicable technical standards or otherwise satisfy all the requirements of this ordinance. If warm season or wetland plantings are involved, a landscape architect or other qualified professional shall verify the planting process and its successful establishment, in accordance with Town standards.
3. Design Summaries. Any changes noted in the as-built survey or final design data compared to the design summaries approved with the final storm water management plans shall be documented and resubmitted to the Building Inspector as part of the verification under sub. 2 above.

(e) Final Inspection. After completion of construction, the Building Inspector shall conduct a final inspection of all permitted sites to determine compliance with the approved plans and other applicable ordinance requirements, including ensuring the site is stabilized. If, upon inspection, the Building Inspector determines that any of the applicable requirements have not been met, the Building Inspector shall notify the permit holder what changes would be necessary to meet the requirements. At the request of the permit holder, the Building Inspector shall provide a notification of noncompliance or a report of final inspection in written or electronic form.

Sec. 26-340. Erosion Control Plan Requirements.

(a) General Erosion Control Plan Requirements and Performance Standards. An erosion control plan shall describe how the permit holder and other responsible party will minimize, to the maximum extent practicable, soil erosion and the transport of sediment from land disturbing activities to waters of the state or other property. To meet this requirement, the following performance standards shall apply:

1. All erosion control plans and associated BMPs shall comply with the planning, design, implementation and maintenance requirements of this ordinance.
2. All erosion control plans shall by design, achieve to the maximum extent practicable, a reduction of 80% of the sediment load carried in runoff, on an average annual basis, as compared with no sediment or erosion controls, until the site is stabilized.
3. Erosion and sediment control BMPs may be used alone or in combination to meet the 80% sediment reduction goal. Plans that comply with the guiding

principles described in sub. (b) below and the specific erosion control plan requirements described in sub. (c) below shall be determined by the Building Inspector as meeting the 80% sediment reduction goal.

4. The Building Inspector may recognize other methods for determining compliance with the 80% sediment reduction goals as they are standardized, including any methods that may come from the procedures under subch. V. of ch. NR 151, Wis. Adm. Code.

Note: *Soil loss prediction tools are available that can estimate the sediment load leaving the construction site under varying land and management conditions and the application of erosion control BMPs. An example of such a tool is the Revised Universal Soil Loss Equation, published by the USDA-Natural Resources Conservation Service.*

(b) Guiding Principles for Erosion Control. To satisfy the requirements of this section, an erosion control plan shall, to the maximum extent practicable, adhere to the following guiding principles:

1. Propose grading that best fits the terrain of the site, avoiding steep slopes, wetlands, floodplains and environmental corridors;
2. Minimize, through project phasing and construction sequencing, the time the disturbed soil surface is exposed to erosive forces.
3. Minimize soil compaction, the loss of trees and other natural vegetation and the size of the disturbed area at any one time;
4. Locate erosion control BMPs upstream from where runoff leaves the site or enters waters of the state and outside of wetlands, floodplains, primary or secondary environmental corridors or isolated natural areas.
5. Emphasize the use of BMPs that prevent soil detachment and transport over those aimed to reduce soil deposition (sedimentation) or repair erosion damage.

(c) Specific Erosion Control Plan Requirements. The following applicable minimum requirements shall be addressed in erosion control plans to the maximum extent practicable. The Building Inspector may establish more stringent erosion and sediment control requirements than the minimums set forth in this section if the Building Inspector determines that an added level of protection is needed to protect an environmentally sensitive area or other property, or to address a change made during plan implementation.

1. Access Drives and Tracking. Provide access drive(s) for construction vehicles that minimize tracking of soil off site using BMPs such as stone tracking pads, tire washing or grates. Minimize runoff and sediment from adjacent areas from flowing down or eroding the access drive.

2. Diversion of Upslope Runoff. Divert excess runoff from upslope land, rooftops or other surfaces, if practicable, using BMPs such as earthen diversion berms, silt fence and downspout extenders. Prevent erosion of the flow path and the outlet.
3. Inlet Protection. Protect inlets to storm drains, culverts and other storm water conveyance systems from siltation until the site is stabilized.
4. Soil Stockpiles. Locate soil stockpiles away from channelized flow and no closer than 25 feet from roads, ditches, lakes, streams, ponds, wetlands or environmental corridors, unless otherwise approved by the Building Inspector. Control sediment from soil stockpiles. Any soil stockpile that remains for more than 30 days shall be stabilized.
5. Cut and Fill Slopes. Minimize the length and steepness of proposed cut and fill slopes and stabilize them as soon as practicable.
6. Channel Flow. Trap sediment in channelized flow before discharge from the site using BMPs such as sediment traps and sediment basins. Stabilize open channels in accordance with Town standards as soon as practicable.
7. Outlet Protection. Protect outlets from erosion during site dewatering and storm water conveyance, including velocity dissipation at pipe outfalls or open channels entering or leaving a storm water management facility.
8. Overland Flow. Trap sediment in overland flow before discharge from the site using BMPs such as silt fence and vegetative filter strips.
9. Site Dewatering. Treat pumped water to remove sediment prior to discharge from the site, using BMPs such as sediment basins and portable sediment tanks.
10. Dust Control. Prevent excessive dust from leaving the construction site through construction phasing and timely stabilization or the use of BMPs such as site watering and mulch – especially with very dry or fine sandy soils.
11. Topsoil Application. Save existing topsoil and reapply a minimum of 4 inches to all disturbed areas for final stabilization, unless otherwise approved by the Building Inspector, such as for temporary seeding or storm water infiltration BMPs. If adequate topsoil does not exist on the site to meet this requirement, it shall be imported or a topsoil substitute such as compost may be used, upon approval by the Building Inspector.
12. Waste Material. Recycle or properly dispose all waste and unused building materials in a timely manner. Control runoff from waste materials until they are removed or reused.

13. Sediment Cleanup. By the end of each workday, clean up all off-site sediment deposits or tracked soil that originated from the permitted site. Flushing shall not be allowed unless runoff is treated before discharge from the site.
14. Final Site Stabilization. All previous cropland areas where land disturbing activities will not be occurring under the proposed grading plans, shall be stabilized within 30 days of permit issuance. Stabilize all other disturbed areas within 7 days of final grading and topsoil application. Large sites shall be treated in stages as final grading is completed in each stage. Any soil erosion that occurs after final grading or the application of stabilization measures must be repaired and the stabilization work redone.
15. Temporary Site Stabilization. Any disturbed site that remains inactive for greater than 7 days shall be stabilized with temporary stabilization measures such as soil treatment, temporary seeding or mulching. For purposes of this subsection, "inactive" means that no site grading, landscaping or utility work is occurring on the site and that precipitation events are not limiting these activities. Frozen soils do not exclude the site from this requirement.
16. Removal of Practices. Remove all temporary BMPs such as silt fences, ditch checks and sediment traps as soon as all disturbed areas have been stabilized.
17. Site Drainage. Site drainage plans shall comply with the provisions of sec. 26-341(d)6. below.

(d) Preliminary Erosion Control Plan Contents. Preliminary erosion and sediment control plans shall contain the following items:

1. A site map in accordance with sec. 26-341 (c) below;
2. A brief narrative describing the proposed land disturbing activity, construction timeline and sequencing, and a general review of the major erosion and sediment control BMPs proposed to be used to minimize off-site impacts during the construction phase and to stabilize the site following construction.
3. Delineation of the following items on the map under par. 1 above:
 - A. The area and size (in acres) of the proposed land disturbance;
 - B. The woodland and wetland areas, and the size (in acres) of each that is proposed to be lost during construction and a general description of the current vegetation types and tree sizes;
 - C. The general location of major BMPs described in sub. 1 above.

(e) Final Erosion Control Plan Contents. The following shall be the minimum requirements for items to be included in a final erosion and sediment control plan:

1. Sites Less than One Acre of Total Land Disturbance.

- A. A narrative describing the proposed land disturbing activity, construction timeline and sequencing, temporary BMPs to be used to minimize off-site impacts during the construction phase, and proposed methods to stabilize the site following construction in accordance with the requirements of this ordinance;
- B. A survey map or scaled site plan drawing of sufficient clarity showing a north arrow, the location of proposed land disturbance, direction of flow for runoff entering and leaving the disturbed area, upslope drainage area (if known), proposed BMPs, existing and proposed slopes, ground cover, buildings, roads, access drives, property boundaries, drainage ways, water bodies, trees, culverts, utilities and other structures within 50 feet of the proposed land disturbance;
- C. The name, address and daytime phone number of the person(s) charged with installing and maintaining all best management practices;
- D. For underground utility installations, the plans must delineate where utilities will be installed, show the location of the open cut and the topography in the area, and list the total lineal feet to be installed and the lineal feet that will be done by open cut; and
- E. Other information determined to be necessary by the Building Inspector to ensure compliance with the requirements of this chapter.

2. Sites One Acre or Greater in Total Land Disturbance.

- A. A site map in accordance with sec. 26-341 (c) below;
- B. A map at a scale of 1 inch equals no more than 100 feet (unless otherwise noted), delineating and labeling the following applicable items:
 - (i) North arrow, graphic scale, draft date, name and contact information for project engineer or planner and designation of source documents for all map features.
 - (ii) Proposed site topography at contour intervals not to exceed two feet, proposed percent slope for all open channels and side slopes and all proposed runoff discharge points from the site;
 - (iii) Proposed building envelopes and other land area to be disturbed and size in acres;

- (iv) All woodland areas, those proposed to be lost or transplanted during construction and acres or numbers of each. For woodlands proposed to be lost, show individual trees larger than eight (8) inches in diameter that are located within twenty (20) feet of proposed grading boundaries;
- (v) Temporary access drive and specified surface material and minimum depth;
- (vi) Temporary flow diversion devices for upslope or roof runoff until site is stabilized;
- (vii) Temporary sediment trapping devices for site perimeter and inlets to culverts and storm drains;
- (viii) Temporary settling basin or other BMP to be used for site dewatering during utility or other subsurface work;
- (ix) Temporary soil stockpile sites indicating setbacks from nearby water resources or environmental corridors and the proposed erosion protection methods;
- (x) Detailed drawings and cross-sections for any sediment traps, basins or other major cut or fill areas requested by the Building Inspector, showing side slopes and elevations;
- (xi) Final stabilization measures for open channels and erosion protection for pipe and channel inlets, outlets and emergency spillways;
- (xii) Location of proposed utilities, including: standard cross-section for buried utilities, associated easements, labeling the type of utility and notes on erosion control and restoration plans;
- (xiii) Final site stabilization instructions for all other disturbed areas, showing areas to be stabilized in acres, depth of applied topsoil, seed types, rates and methodology, fertilizer, sod or erosion matting specifications, maintenance requirements until plants are well established, and other BMPs used to stabilize the site;
- (xiv) Detailed construction notes clearly explaining all necessary procedures to be followed to properly implement the plan, including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse

disposal, inspection requirements, and the installation, use, and maintenance of best management practices proposed in the plan;

- (xv) Location of soil evaluations with surface elevations and unique references to supplemental soil evaluations report forms in accordance with sec. 26-342(e) below. Also show estimated seasonal water table depths and soil textures down to planned excavation depths, which may be on a separate map with sufficient references to the proposed site plan.

Note: *Water table depths are needed to plan for dewatering activities for excavations and utility installations and to document compliance with water table separation requirements under sub. 26-341(e) below. The separate map may be at a different scale if needed. Soil textures help the project engineer and grading contractor plan for excavation, soil stockpiles, earthen berm compaction, pond lining, dust control, site stabilization and other grading related activities.*

- (xvi) Other items specified by the Building Inspector as necessary to ensure compliance with this ordinance.

C. Supporting information for the plan reviewer only:

- (i) A narrative summary of the erosion control plan, briefly explaining the overall plan and, any unique information that led to the selection of BMPs and how the plan meets the guiding principles under sub. (b) above and the specific requirements under sub. (c) above;

Note: *This information may be combined with a narrative for the storm water management plan under sec. 26-341(g)12. The information may also be useful to the grading contractor and could be included in the construction notes on the plan map under sub. B(xiv) above.*

- (ii) Summary of design data for any structural BMP such as sediment basins or sediment traps. A professional engineer, licensed in the State of Wisconsin, shall stamp and sign a statement approving all designs and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted plans comply with the requirements;
- (iii) Open channel design and stabilization data to support the selected BMPs for stabilization;
- (iv) Soil evaluation reports, in accordance with the standards in Sec. 26-342(e), with unique references and elevations that match the map under sub. B(xv) above.
- (v) Estimated time soil stockpiles will exist to support the selected BMPs for erosion control;

- (vi) Documentation that proposed utility locations and installation scheduling has been coordinated with the affected utility companies.
- (vii) Documentation of any other calculations used to demonstrate compliance with the performance standards in this section.

Sec. 26-341. Storm Water Management Plan Requirements.

(a) General Storm Water Management Plan Requirements. A storm water management plan shall describe how the permit holder and other responsible party will meet the storm water management requirements of this section and other related requirements in this ordinance. All storm water management plans and associated BMPs shall comply with the planning, design, implementation and maintenance requirements described in this ordinance.

(b) Guiding Principles for Storm Water Management. To satisfy the requirements of this section, a storm water management plan shall, to the maximum extent practicable, adhere to the following guiding principles:

1. Preserve natural watershed boundaries and drainage patterns;
2. Reserve adequately sized areas for storm water infiltration, detention and treatment early in the site planning process;
3. Locate storm water BMPs prior to runoff leaving the site or entering waters of the state, and outside of wetlands, floodplains, primary or secondary environmental corridors or isolated natural areas;
4. Minimize soil compaction and maintain pre-development groundwater recharge areas;
5. Minimize impervious surfaces and have them drain to vegetated areas for pollutant filtering and infiltration;
6. Emphasize vegetated swales, warm season and wetland plantings, and low flow velocities for storm water conveyance, treatment and infiltration, especially for transportation related projects;

Note: Tall, dense, deep-rooted vegetation and low flow velocities in open channels encourages infiltration and increases their effectiveness for runoff pollutant removal. Check dams may also be included in the swale design to slow runoff flows and improve pollutant removal. Soil amendments such as compost can help reduce soil compaction and increase infiltration.

7. Allow for different storm water management strategies for cleaner runoff (i.e. roofs) versus more polluted runoff (i.e. heavily used streets and parking lots);

8. Provide for emergency overflow in all storm water BMP designs;
9. Distribute storm water bioretention and infiltration BMPs throughout the site plan for large land developments;

(c) Site Plan Map Requirements. A site plan map and supporting data of site conditions at a scale of 1 inch equals no more than 100 feet (unless otherwise noted) shall delineate or display all the following applicable items:

1. Development title, graphic scale and north arrow;
2. Property location description by public land survey system (1/4 section, section, township, range, county);
3. Location map (smaller scale) showing the site location within a public land survey section or subdivision, oriented the same as par. 4 below;
4. Ownership boundaries, bearings, lengths and other survey references that will accurately identify the sites location, in accordance with s. 236 Wisconsin Statutes and county mapping standards for all land divisions;
5. Lot numbers and dimensions, including outlots for all land divisions;
6. Name and complete contact information for the applicant, landowner, developer and project engineer;
7. Surveyor's certificate, signed, dated and sealed for all land divisions;
8. Sheet numbers and revision dates on every page;
9. Existing site topography at a contour interval not to exceed 2 feet, including spot elevations for physical features such as culvert (invert elevations), retaining walls, road and ditch centerlines and topographic high and low points;
10. Location and name, if applicable, of all lakes, streams, channels, ditches, and other water bodies or areas of channelized flow on or adjacent to the site;
11. Location and name, if applicable, of all wetlands and identification of source of delineation. For final land divisions, these boundaries shall be field verified;
12. Boundaries of shoreland zones and the ordinary high water mark (OHWM) for any navigable water body as defined by the Waukesha County Shoreland and Floodland Protection ordinance. For final land divisions, the OHWM boundaries shall be field verified;

13. Boundaries and elevation of the 100-year floodplains, flood fringes and floodways, as defined by the Waukesha County Shoreland and Floodland Protection ordinance. For final land divisions, these boundaries and elevations shall be field verified;
14. Boundaries and soil symbol for each soil mapping unit and the identification of all hydric soils as defined by the USDA-Natural Resources Conservation Service;
15. Locations of all available soil borings or soil profile evaluations with unique references to supplemental data report forms;
16. Location of primary and secondary environmental corridors, as defined by the Southeastern Wisconsin Regional Planning Commission. For final land divisions, these boundaries shall be field verified;
17. Location and description of isolated natural area boundaries as defined by the Southeastern Wisconsin Regional Planning Commission, woodland areas and other vegetative cover types;
18. Location and descriptive notes for existing and proposed structures within 50 feet of the property boundaries and their proposed use, including, but not limited to buildings and foundations, roads, parking areas, fence lines, access lanes, culverts (include size and type), above ground utilities and retaining walls;
19. Location and descriptive notes for other known existing site features including, but not limited to rock outcrops or other karst features, tile drains, buried utilities, dumps, landfills, manure or other waste storage facilities;
20. Boundaries and descriptive notes for all applicable setbacks and for "protective areas", as specified in sec.26-341(d)4. of this ordinance;
21. Location and descriptive notes for any existing or proposed easements, right-of-ways, vision corners or other known site restrictions. Road right-of ways and building setbacks shall be in compliance with all applicable administrative codes, adopted plans and ordinances;
22. Location and descriptive notes for existing and proposed public dedications of parcels or right-of-ways;
23. Location and descriptive notes for preplanned building or waste disposal sites, when limited by site features;
24. Location and documentation of any existing well and delineation of any applicable regulatory setbacks, in accordance with ch. NR 811 and 812 Wis. Admin. Code;

25. Notes describing source documents, date and measure of accuracy for all applicable mapping features noted above;
26. Other site information that the Building Inspector determines is necessary to administer this ordinance.

Note: *The Building Inspector will provide the applicant with a written checklist of the above items, including guidance on which items are applicable to the proposed project. Items may need to be displayed on more than one map for purposes of clarity.*

(d) Specific Storm Water Management Plan Requirements and Performance Standards. All storm water management plans and associated BMPs shall meet the following minimum requirements to the maximum extent practicable. It is highly recommended that the applicant meet with the Building Inspector prior to preparing a storm water management plan to determine the applicability of these requirements early in the site planning process.

A. Peak Discharge.

- A. Minimum requirement. To minimize downstream bank erosion and the failure of downstream conveyance systems, the calculated post-development peak storm water discharge rate shall not exceed the calculated pre-development discharge rates for the 2-year, 10-year, and 100-year, 24-hour design storms. Modeling requirements for this provision are further described in sec. 26-342 below.
- B. Release Rate Per Acre. The Building Inspector may establish a maximum allowable release rate on a per acre basis that would supersede the requirements of sub. A. above for certain watersheds after the necessary hydrologic modeling is completed and the maximum release rate is approved by the Town.

Note: *A detailed watershed-based hydrologic analysis can generate a more accurate peak discharge rate for the protection of downstream properties from increased flooding due to the addition of impervious surfaces. This method has been used very effectively in the Milwaukee area and other parts of the country and may be used in Town of Brookfield in the future.*

- C. Peak Discharge Exemptions. The Building Inspector may exempt certain sites or portions of sites from the peak discharge requirements of this subsection, such as sites that drain directly to a large lake, subject to the procedures of sub. (e) below.

B. Total Suspended Solids (Ref: NR 151.12)

- A. By design, each storm water management plan shall meet the following post-development total suspended solids reduction targets, based on average annual rainfalls, as compared to no runoff management controls:

- (i.) For new land development, 80% reduction in total suspended solids load;
- (ii.) For redevelopment, 40% reduction of total suspended solids load;
- (iii.) For in-fill development that occurs prior to October 1, 2012, 40 % reduction total suspended solids load;
- (iv.) For in-fill development that occurs after October 1, 2012, 80% reduction of total suspended solids load.

Note: *The first flush of storm water runoff from an urban landscape contains the vast majority of pollutants, which tend to be associated with suspended solids. Pollutant loading models such as SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids under sub. A above.*

3. **Infiltration.** BMPs shall be designed, installed, and maintained to infiltrate runoff in accordance with the following requirements, except as provided in subs. E. through H. below.

A. Residential. For residential developments one of the following shall be met:

- (i.) Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% 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 1% of the project site is required as an effective infiltration area.
- (ii.) Infiltrate 25% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate runoff curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, not composite curve numbers, as prescribed in sec. 26-342. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.

B. Nonresidential. For non-residential development, including commercial, industrial and institutional development, one of the following shall be met:

- (i) Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60% 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 2% of the project site is required as an effective infiltration area.

- (ii) Infiltrate 10% of the post-development runoff volume from the 2-year, 24-hour design storm. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, not composite curve numbers, as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.

- C. Modeling. Refer to sec. 26-342(a) for details on calculating runoff volumes and pre-development conditions.
- D. Pretreatment. Pretreatment shall be required before infiltrating parking lot and road runoff from commercial, industrial and institutional areas. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with sub. H below. Pretreatment options may include, but are not limited to, oil/grease separators, sedimentation or bioretention basins, filtration swales or filter strips. All designs shall comply with the technical standards in sec. 26-342(b).

Note: *To achieve the infiltration requirement for the parking lots or roads, “maximum extent practicable” should not be interpreted to require significant topography changes that create an excessive financial burden. To minimize potential groundwater impacts, it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.*

- E. Infiltration Exclusions. Infiltration of runoff shall not be credited toward meeting the requirements of this subsection for the following:
 - (i). Runoff from outdoor material storage and loading docks for tier 1 and tier 2 industrial facilities, as identified in NR 216(2) Wis. Admin. Code.
 - (ii). Runoff from fueling and vehicle maintenance areas, not including rooftops and canopies.
 - (iii). Infiltration of runoff within 1000 feet upgradient or within 100 feet downgradient of karst features.
 - (iv). Infiltration of runoff from any area except rooftops with less than 3 feet separation distance from the top of the filtering layer to the elevation of seasonal high groundwater or the top of bedrock.

- (v). Infiltration of runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from top of the filtering layer to the elevation of seasonal high groundwater or the top of bedrock.
- (vi). Areas within 400 feet of a community water system well as specified in s. NR 811.16(4), Wis. Adm. Code, or within 100 feet of a private well as specified in s. NR 812.08(4), Wis. Adm. Code, for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development, not including rooftop runoff.
- (vii). Areas where contaminants of concern, as defined in s. NR 720.03(2), Wis. Adm. Code are present in the soil through which infiltration will occur.

Note: *The areas listed in par. E above are not recommended due to the potential for groundwater contamination.*

- F. Infiltration Exemptions. The infiltration requirements of this subsection do not apply to frozen soil conditions and may be exempted if all available soils have a measured infiltration rate of less than 0.6 inches per hour and the Building Inspector determines it would be impracticable to modify existing soil conditions. Other sites may be exempted in accordance with sub.(e). below.
- G. Alternate runoff uses. Where storage and reuse of runoff are employed, such as to support green roofs, landscape watering, toilet flushing, laundry or irrigation, such alternate uses shall be given equal credit toward the infiltration volume required by this section.

10. Groundwater protection.

- (i). Infiltration systems designed in accordance with this subsection 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 Chapter NR 260 Wis. Adm. Code. However, if site-specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.
- (ii). The discharge from BMPs shall remain below the enforcement standard at the point of standards application.

- (iii). A storm water BMP may be subject to additional regulatory procedures if it meets the definition of an “injection well” under Chapter NR 815 Wis. Admin. Code.
- (iv). All storm water BMPs shall comply with the provisions of any applicable wellhead protection plan for a community water supply under Chapter NR 811 Wis. Admin. Code.

4. Protective Areas (Ref: NR 151.12 (5) (d))

- A. A “Protective area” is 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 widths specified in Table 2.02-2, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. A 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.

Type of Resource	Protective Area
Outstanding and Exceptional Resource Waters and Wetlands in Areas of Special Natural Resource Interest as Specified in s. NR 103.04. (3)	75 feet
Perennial/Intermittent Streams per USGS Map or County Soil Survey map, whichever is more current	50 feet
Lakes	50 feet
Highly Susceptible Wetlands (1) (3)	50 feet
Less Susceptible Wetlands (2) (3)	10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet
Other Waterways with Drainage Areas > 130 ac	10 feet

- (1) 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 s. NR 103.08(1m). This paragraph 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.
- (2) Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.
- (3) 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 s. NR103.03.

B. Requirements. The following requirements shall be met for all land development activity located within a protective area:

- (i). Impervious surfaces shall be kept out of the protective area unless impractical, with consideration of the planned use. The stormwater management plan shall contain a written site-specific explanation for any parts of the protective area that are disturbed during construction.
- (ii). 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% 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.

In selecting the vegetative cover for the protective area, existing natural vegetative cover shall be left undisturbed, to the maximum extent practical. Where existing vegetative cover must be disturbed, consider revegetating the protective area with native plantings, where feasible.

Note: It is recommended that seeding of non-aggressive vegetative cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long-term bank stability because of an extensive root system is preferable. Vegetative cover can be measured using the line transect method described in the University of Wisconsin Extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".

- (iii.) Best management practices such as filter strips, swales, or wet detention basins, that are designed to control pollutants from non-point sources may be located in the protective area, but shall not encroach into wetlands, floodplains or primary or secondary environmental corridors.

Note: Other regulations, such as ch. 30, Wisconsin Statutes, and chs. NR 103, 115, 116 and 117, Wis. Adm. Code, and their associated review and approval process may apply in the protective area.

- C. Protective Area Exemptions. The protective area requirements of this subsection may be exempted in accordance with sub. (e). below and do not apply to the following:
 - (i). Structures that cross or access surface waters such as boat landings, bridges and culverts;
 - (ii). Structures constructed in accordance with s. 59.692(1v), Wisconsin Statutes; and
 - (iii). Sites where runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note: A vegetated protective area to filter runoff pollutants from post-construction sites described in sub. 4.C above is not necessary since runoff is not entering the surface water at that location. Other practices, necessary to meet the requirements of this section, such as a swale or basin, will need to be designed and implemented to reduce runoff pollutants before the runoff enters a surface water of the state.

- 5. Fueling and Vehicle Maintenance Areas. Fueling and vehicle maintenance areas shall have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

Note: A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.

6. Site Drainage. Measures shall be implemented to ensure proper site drainage, prevent property damage and protect public health and safety, including the following minimum requirements:
 - A. Drainage easement. Perpetual drainage easements or other deed restrictions shall be recorded on the property to preserve major storm water flow paths and permanent storm water BMP locations. Covenants in these areas shall not allow buildings or other structures and shall prevent any grading, filling or other activities that interrupt or obstruct flows in any way. Covenants shall also specify maintenance responsibilities and authorities in accordance with sec. 26-343.
 - B. Site grading. Site grading shall ensure positive flows away from all buildings, roads, driveways and septic systems, be coordinated with the general storm water drainage patterns for the area, and minimize adverse impacts on adjacent properties.
 - C. Street drainage. All street drainage shall be designed to prevent concentrated flows from crossing the traffic lanes to the maximum extent practicable. Design flow depths at the road centerline for on-street drainage, shall not exceed six (6) inches during the peak flows generated by the 100-year, 24-hour design storm, using planned land use conditions for the entire contributing watershed area.
 - D. Bridges and cross-culverts. All new or modified bridges and cross-culverts shall comply with applicable design standards and regulations, facilitate fish passage and prevent increased flooding or channel erosion upstream or downstream from the structure. Design flow depths at the road centerline for all crossings shall not exceed six (6) inches during the peak flows generated by the 100-year, 24-hour design storm, using planned land use conditions for the entire contributing watershed area. All predevelopment runoff storage areas within the flow path upstream of bridges and cross-culverts shall be preserved and designated as drainage easements, unless compensatory storage is provided and accounted for in modeling. Roadway cross culverts shall be designed to convey the peak discharge for a 25-year frequency storm event without flows entering the traveled way. As-built documentation shall be submitted in accordance with sec. 26-335 for all new or modified structures that are located within a mapped floodplain or that the Building Inspector determines to be necessary to maintain floodplain modeling for the applicable watershed.
 - E. Subsurface drainage. Basement floor surfaces shall be built one (1) foot above the seasonal high water table elevation, as documented in

the submitted soil evaluations in accordance with county standards, and shall avoid hydric soils as much as possible. The Building Inspector shall be notified of any drain tiles that are uncovered during construction, which the Building Inspector may require to be restored or connected to other drainage systems. No discharge of groundwater from tile lines, sump pumps or other means shall be allowed onto another persons land or any public space without the written approval of the owner or unit of government.

Note: Waukesha County Land Resources Division has developed detailed technical guidelines entitled Basement Wetness and Flooding Prevention Standards to address basement/groundwater separation concerns. This document is available on the county's web site.

- F. Open channels. All open channel drainage systems shall at a minimum be designed to carry the peak flows from a 25-year, 24-hour design storm using planned land use for the entire contributing watershed area. Side slopes shall be no steeper than 4h:1v unless otherwise approved by the Building Inspector for unique site conditions. Open channels that carry runoff from more than 130 acres shall at a minimum be designed to carry the peak flows from a 25-year, 24-hour design storm. Drainage easements on private property are required if the appropriate flow cannot be contained within the road right-of-way. Open channels within a drainage easement shall be designed to convey the peak discharge for a 100-year frequency storm event.
- G. Storm sewers. All storm sewers shall be designed in accordance with applicable community technical standards and specifications. Storm sewers shall be designed to convey the peak discharge for a 10-year frequency storm event. Storm sewers within a drainage easement shall be designed to convey the peak discharge for a 100-year frequency storm event.
- H. All conveyance systems shall be designed to safely pass the 100-year storm flow without damage to adjacent structures. Unless waived by the Town of Brookfield, all new structures shall be constructed at least 2 feet higher than the estimated 100-year overflow elevation.
- I. Structure protection and safety. Flows generated by the 100-year, 24-hour design storm under planned land use conditions may exceed the design capacity of conveyance systems, but shall not come in contact with any buildings. For buildings designed for human occupation on a regular basis, the following additional requirements shall apply:
 - (i) The lowest elevation of the structure that is exposed to the ground surface shall be a minimum of two (2) feet above the maximum water surface elevation produced by the 100-year, 24 hour design storm, including flows through any storm water

BMP that may temporarily or permanently store water at a depth of greater than one (1) foot; and

- (ii) The structure shall be setback at least 50 feet from any storm water BMP or internally drained area that may temporarily or permanently store water at a depth of greater than one (1) foot. Setback distance shall be measured from the closest edge of water at the elevation produced by the 100-year, 24-hour design storm.

Note: Waukesha County Land Resources Division has developed detailed technical guidelines entitled [Basement Wetness and Flooding Prevention Standards to address basement/surface water separation concerns for internally drained areas.](#) This document is available on the county's web site.

7. Dry Weather Outlet Standards

- A. Dry weather water outlets are prohibited from discharging directly to any public property, public R/Wm public street, or public sidewalk if such discharge creates or contributes to a public hazard or nuisance. No person shall hereafter construct, build, establish, replace, or maintain any dry weather water outlet which discharges onto a public R/W, public street, public sidewalk, roadside ditch, or other public property maintained by the Village without first obtaining written permission to do so from the Building Inspector.

Failure to obtain written permission from the Building Inspector for a dry weather water outlet discharge onto public street, public sidewalk, or other property shall be deemed a violation of the Stormwater Ordinance.

- B. Sump pumps installed to receive or discharge groundwaters or stormwater runoff shall be connected to the storm sewer system where possible or discharge into a designated stormwater runoff drainage facility. No sump pump shall discharge directly onto the street surface or public sidewalk. Sump pumps are prohibited from discharging in any way that would cause water to flow onto any public sidewalks, streets, or driveways within the public R/W. Sump pump discharges shall discharge a minimum of ten feet away from the Town right-of-way and shall be equipped with an acceptable method of energy dissipation at the discharge point.
- C. Footing drains and drainage tile shall discharge directly into a storm sewer or other storm drainage facility. No footing drains or drainage tiles shall be connected to a sanitary sewer or be discharged directly onto a street surface or public sidewalk.
- D. Downspouts and roof drains shall be discharged onto the ground. No downspouts or roof drains shall be connected to a sanitary sewer or be discharged directly onto a street surface or public sidewalk.

Downspouts and roof drains shall discharge a minimum of ten feet away from the Town right-of-way and shall be equipped with an acceptable method of energy dissipation at the discharge point.

8. Additional Requirements. The Building Inspector may establish more stringent requirements than the minimums set forth in this section, such as addressing thermal impacts of storm water or chronic wetness conditions, if the Building Inspector determines that an added level of protection is needed to protect:
 - A. A cold water stream, outstanding water resource or exceptional water resource;
 - B. An environmentally sensitive area;
 - C. A downstream property;
 - D. Public health or safety.

(e) Technical Exemptions.

1. Exemption Criteria. Following the provisions of this subsection, the Building Inspector may exempt a site or a portion of a site from meeting certain technical requirements of this section if the Building Inspector determines that exemption criteria under sub. (d) above, or one or more of the following applies:
 - A. Off-Site BMP(s). The requirement has been satisfied through the use of off-site BMP(s). Off-site BMPs could be installed beyond the boundaries of the property covered by the application as part of a regional storm water management plan or through other legal arrangements. However, to be eligible for this exemption, the off-site BMP(s) must treat runoff from the site covered by the application;
 - B. Internally Drained Sites. The site is internally drained and will not discharge runoff from the site after development occurs; or

Note: Only ordinance requirements designed to address off-site impacts would be eligible for this exemption, not site drainage requirements such as structure setbacks and minimum basement separations.”

- C. Site Conditions. It is impracticable to meet the requirement due to site conditions such as slopes, soils, proximity to existing structures or desirable trees, limited site dimensions, surrounding land uses, the potential for groundwater contamination, public health or safety problems, or other factors beyond the control of the applicant. No site shall be entitled to an exemption under this paragraph due solely to the size of the proposed land development activity in relation to the parcel size. However, the Building Inspector shall provide special consideration in granting exemptions under this paragraph for the following sites:
 - (i) Redevelopment sites.

- (ii) In-fill development areas less than 5 acres.
- (iii) Highway projects where limited public right-of-way land is available for the installation of storm water BMPs.

Note: *The Building Inspector may use cooperative working agreements to administer exemptions for municipal road construction or reconstruction projects.*

- (iv) Land developments where less than 10% of the proposed disturbed area is planned to be impervious surfaces and the total cumulative area of all impervious areas is less than 1 acre using the final build-out condition.

2. Application for Exemption. An exemption under sub. 1. above may only be granted by the Building Inspector upon the applicant submitting the following items to the Building Inspector, which shall constitute a completed application:

- A. A written request describing the provisions of this subsection for which an exception is being requested and an explanation of why;
- B. A site plan in accordance with sub. (c) above, including the delineation of the area and size (in acres) to which the exemption would apply and any other storm water BMPs required to meet this ordinance or as recommended in a regional storm water management plan;
- C. The necessary technical documentation to demonstrate that the site meets one or more of the criteria for which an exemption is being applied, including documentation of the applicable provisions of any regional storm water management plan that may be involved;
- D. For off-site BMP(s) under sub. 1.A. above:
 - (i) Documentation that the necessary BMP(s) have been properly installed, including as-built plans, construction certification and design summaries in accordance with sec. 26-335(d);
 - (ii) A copy of the recorded maintenance agreement in accordance with sec. 26-343, and any other easements or legal arrangement that may be involved to ensure the long-term maintenance of the off-site BMP(s).
 - (iii) Documentation of payment of any applicable fees that may be required by a unit of governmental charged with implementing a regional storm water management plan.

Note: *Fees may be through a storm water utility district or other unit of government and would usually be based on an equitable distribution of costs for land acquisition, engineering design, construction,*

certification and maintenance of storm water BMPs implemented through the regional storm water management plan.

- E. Other materials that the Building Inspector determines to be necessary to make a determination under this subsection or to comply with this ordinance.
3. Review Procedure. The Building Inspector shall review all exemption application materials submitted under sub. 2 above, determine compliance with this section and notify the applicant of a decision within 20 working days of the submittal date, in accordance with the procedures under sec. 26-334(f) above. In consideration of all exemption requests, the Building Inspector shall ensure that the applicant meets the requirements of this section to the maximum extent practicable.
 4. Exemption Fee. For those sites that are exempted under this subsection, and are not publicly funded, the applicant shall contribute funds to the **Town Storm Water Utility** to be used exclusively for storm water BMP implementation or stream restoration expenses within the Town. The amount of the payment shall be based on the average costs for the typical BMP(s) that would have been required on-site to comply with the requirements of this section had an exemption not been granted. The Town shall **publish a fee schedule** for this purpose, to be updated as needed to reflect current BMP costs.
 5. Appeal. If the applicant does not agree with any determination of the Building Inspector under this subsection, the applicant may appeal the decision pursuant to the procedures in sec. 26-345(c).
- (f) Preliminary Storm Water Management Plan Requirements.** Preliminary storm water management plans shall contain the following applicable items:
1. Drafting date and contact information for the project engineer with all other mapping elements and scale consistent with the site plan map;
 2. Delineation of existing and proposed watersheds, subwatersheds and major flow paths within the site and draining into the site from adjacent properties;
 3. Location, type and preliminary design of proposed storm water BMPs needed to comply with this ordinance;
 4. Location and type of major storm water conveyance systems proposed for the site;
 5. Existing and proposed storm water discharge points;
 6. Location and preliminary dimensions of proposed drainage easements;

7. Location of soil borings and soil profile evaluations with surface elevations and unique references to supplemental data sheets, as needed to determine feasibility of any proposed storm water BMP and to comply with applicable BMP technical standards;

Note: *The required location, depth and type of soil evaluations will depend on the storm water BMPs proposed for the site. In general, soil profile evaluations usually need to extend to a depth of 3-10 feet below the proposed bottom elevation of storm water BMPs. Refer to BMP technical standards for details.*

8. Preliminary location of access lanes for maintenance of storm water BMPs;
9. Support documentation for the plan reviewer, including:
 - A. A preliminary plan narrative describing site drainage, ultimate receiving water body for off-site discharges, major site restrictions, and how the preliminary storm water management plan will meet the requirements of this ordinance and other objectives identified by the project engineer;
 - B. Summary of watershed, subwatershed and land use data in acres and the preliminary results of any hydrology calculations;
 - C. Soil profile evaluation data in accordance with BMP technical standards;
 - D. Proposed ownership and maintenance responsibilities for all proposed storm water BMPs.

Note: *Mapping elements may be included in the site plan map.*

(g) Final Storm Water Management Plan Requirements. Final storm water management plans shall contain the following applicable items:

1. Drafting date and contact information for the project engineer, with all other mapping elements and scale consistent with the site plan map;
2. Location of existing and proposed storm water discharge points;
3. Delineation and labeling of all proposed impervious areas and accompanying area computations;
4. Final design drawings of all proposed storm water BMPs with unique references to support documentation, prepared in accordance with minimum Town standards and of sufficient clarity for those responsible for site grading, including:
 - A. Plan views showing the location of proposed BMPs in combination with the site plan map at a scale of 1 inch equals no more than 100 feet;

- B. Additional detail plan view drawings at a scale of 1 inch equals no more than 40 lineal feet, showing proposed 2 foot contours and all critical design features and elevations;
 - C. Detailed cross-sections and profiles of each BMP showing all critical design features, side slopes, structures, soil profiles and applicable elevations, including seasonal high water table;
 - D. Detailed drawings or material specifications for inlets or outlets.
5. Type, size, location and cross-sections of all pipes, open channels, grade stabilization structures and other proposed storm water conveyance systems, with unique references to support documentation;
 6. Location and dimensions of proposed drainage easements;
 7. Location, dimensions and surfacing material or soils data of proposed access lanes and delineation of easements needed to allow future maintenance of all storm water BMPs in accordance with sec. 26-343(b) below. The minimum width of any access easement shall be 15 feet;
 8. Location of soil borings and soil profile evaluations with surface elevations and unique references to supplemental data sheets, as needed to determine feasibility of any proposed storm water BMP and to comply with applicable technical standards;
 9. Detailed construction notes explaining all necessary procedures to be followed to properly implement the plan, including planting and landscaping specifications, timing and sequencing of construction and any temporary measures needed to protect BMPs during the construction phase;

Note: *Some BMPs, such as infiltration and bioretention practices, are susceptible to sedimentation and may need to be protected during construction or planned for construction later in the project sequence.*

10. A detailed construction inspection plan, outlining the critical elements in the plan that need to be surveyed or inspected by a representative of the project engineer, the Building Inspector or the municipality, and the timing and notification requirements involved.

Note: *Examples of critical elements for a construction inspection plan include, but are not limited to: checking subgrade elevations or the placement of footings, pipes or other structures prior to covering, soil testing, material inspections and final grade checks before seeding. Any inspections conducted by the BUILDING INSPECTOR or the municipality does not waive the permit holder's responsibility for construction oversight and verification.*

11. A final storm water BMP maintenance agreement in accordance with sec. 26-343;

12. Support documentation summarized in accordance with Building Inspector standards, including but not limited to:
 - A. A narrative summary of the storm water management plan, briefly explaining any unique information that led to the selection of BMPs, how the proposed plan meets the guiding principles under sub. (b) above, and the specific storm water planning requirements under sub. (d) above.

Note: *The narrative can be combined with the narrative for erosion control planning under sec. 26-340 above. Some provisions may also be included in the construction notes under sub. 9. above.*

- B. Maps of existing and proposed watersheds, subwatersheds, Tc/Tt flow paths, soil types, hydrologic soil groups, land uses/cover type and accompanying runoff curve numbers within the site and draining into the site from adjacent properties, with unique references to hydrology data summaries and a description of the ultimate receiving water body(s) for off-site discharges;
- C. Pre-development and post-development hydrology and pollutant loading (if applicable) data for each watershed, such as peak flows and runoff volumes, as needed to meet the requirements of this ordinance. All major assumptions used in developing input parameters shall be clearly stated and cross-referenced to the maps under par. B. above;
- D. Impervious surface maps and calculations of runoff volumes and effective infiltration areas, in accordance with sub. (d).3. above.
- E. Hydraulic and hydrologic data summaries for all existing and proposed pipes, open channels, grade stabilization structures and other storm water conveyance systems, and the necessary documentation to demonstrate compliance with the site drainage requirements under sub. (d).6. above.
- F. BMP design data for each proposed BMP, showing how it complies with applicable technical standards and the requirements of this ordinance;
- G. Soil evaluation reports, following the standards in sec. 26-342(e), with matching references to map features showing their location and elevations;
- H. A cover sheet stamped and signed by a professional engineer registered in the State of Wisconsin indicating that all plans and supporting documentation have been reviewed and approved by the engineer and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted

plans comply with the requirements.

- I. Cost estimates for the installation of proposed storm water BMPs, which shall serve as a basis for the financial assurance under sec. 26-335(c) above. The applicant may use average costs for BMP installations in the county rather than specific estimates, upon approval by the Building Inspector.
 - J. For sites where changes are proposed in storm water flow paths, or where proposed storm water discharges may otherwise have a significant negative impact on downstream property owner(s), the Building Inspector may require the applicant to submit written authorization or complete other legal arrangements with the affected property owner(s); and
13. Other items deemed necessary by the Building Inspector to ensure compliance with the requirements of this ordinance.

Sec. 26-342. Technical Standards and Specifications.

(a) Hydrologic and Hydraulic Computations.

- 1. Models. All computations of runoff volumes and peak flow rates used in the development of erosion control and storm water management plans in accordance with this ordinance shall be based on United States Department of Agriculture - Natural Resources Conservation Service (NRCS) methodology. Models such as WinSLAMM, P8, or other Building Inspector approved models may be used to evaluate the efficiency of the design in reducing total suspended solids to meet this ordinance. Models such as RECARGA or other Building Inspector approved models may be used to evaluate the efficiency of the design in meeting the infiltration requirements of this ordinance.
- 2. Rainfall depths. To determine compliance with this ordinance, the following design storm rainfall depths shall be used, which are derived from NRCS publications and extrapolated for the Town of Brookfield:

Design Storm	1-year 24-hour	2-year 24-hour	10-year 24-hour	100-year 24-hour
Rainfall Depth	2.3 inches	2.7 inches	4.0 inches	5.6 inches

Other rainfall depths may be considered for use if approved by the Town.

- 3. Runoff curve numbers. All computations of pre-development conditions as specified in this ordinance shall use those NRCS runoff curve numbers assigned for a "good" hydrologic condition for each land cover type. For

lands where the pre-development land use was cropland, the following NRCS curve number values shall be used as maximums:

Soil Hydrologic Group	A	B	C	D
NRCS Runoff Curve Number	56	70	79	83

Note: Soil hydrologic groups are available from the Building Inspector and can be found on the Waukesha County GIS System.

4. Average annual rainfalls. All modeling involving average annual rainfall or runoff volumes shall use rainfall data from the Milwaukee area between March 28 and December 6, 1969 as the typical annual rainfall pattern for the Town of Brookfield.

Note: A copy of the rainfall data noted above is available from the Building Inspector.

5. Rainfall distribution. All peak flow calculations shall use Type II rainfall distribution patterns, as defined in NRCS methodologies. Other rainfall distribution methodologies may be considered if approved by the Town.
6. Other methods. All velocity and peak flow computations for open channels and storm sewer pipe flows shall be based on Manning’s Formula. Flow routing, culvert design, weir and orifice flow and other related hydraulic computations used to design storm water management facilities shall be based on standard applicable engineering formulas. Any design data or methodology proposed to be used for hydrologic or hydraulic computations other than those prescribed in this ordinance shall be approved by the Building Inspector. Revisions or updates to the rainfall depths and distribution prescribed above may be allowed upon approval by the applicable regulatory agencies, and the Building Inspector.

(b) Design Methods

1. Stormwater Runoff Calculations

A. For design of volume-dependent practices (detention basins, retention basins, infiltration systems), a hydrograph-producing method hydrologic model shall be developed. The following computer programs shall be allowed:

- (i) TR-55
- (ii) TR-20
- (iii) HEC-1
- (iv) HEC-HMS
- (v) Other computer programs as allowed by the Building Inspector.

B. The Rational Method may be used to calculate peak discharges for tributary areas less than 20 acres for purposes of conveyance system design.

C. Estimation of Required Storage Volume

(i) Final detention basin sizing shall be based on hydrograph routing through the basin with the proposed outlet structure.

(ii) The Soil Conservation Service TR-55 Approximate Method may be utilized to calculate the required storage volume. This may be used for developments with watershed areas of less than 25 acres which do not involve significant off-site drainage that must be passed through the detention basin or routing of stormwater runoff through a series of detention basins. Soil Conservation Service Type II rainfall shall be utilized to estimate storage volume and peak inflow requirements.

D. Estimation of Required Storage Volume

(i) Final detention basin sizing shall be based on hydrograph routing through the basin with the proposed outlet structure.

(ii) The Soil Conservation Service TR-55 Approximate Method may be utilized to calculate the required storage volume. This may be used for developments with watershed areas of less than 25 acres which do not involve significant off-site drainage that must be passed through the detention basin or routing of stormwater runoff through a series of detention basins. Soil Conservation Service Type II rainfall shall be utilized to estimate storage volume and peak inflow requirements.

E. Estimation of Required Storage Volume

(i) Final detention basin sizing shall be based on hydrograph routing through the basin with the proposed outlet structure.

(ii) The Soil Conservation Service TR-55 Approximate Method may be utilized to calculate the required storage volume. This may be used for developments with watershed areas of less than 25 acres which do not involve significant off-site drainage that must be passed through the detention basin or routing of stormwater runoff through a series of detention basins. Soil Conservation Service Type II rainfall shall be utilized to estimate storage volume and peak inflow requirements

F. Stormwater Conveyance System Design

- (i) Storm sewers shall be designed in accordance with procedures described in Procedures 13-25-35 through 13-25-45 of the Wisconsin Department of Transportation (WisDOT) Facilities Design Manual (FDM).
- (ii) Ditches shall be designed in accordance with procedures described in Procedures 13-30-5 through 13-30-10 of the WisDOT FDM.
- (iii) Cross culverts shall be designed in accordance with procedures described in Procedure 13-15-10 of the WisDOT FDM.

(c) Design Criteria

1. Wet Detention Basins

Design in accordance with the Wet Detention Basin Conservation Practice Standard (DNR), Section V.A.1, 2, 4-11 (Appendix C).

2. Dry Detention Basins

- A. Minimum grades for the bottom of the basin shall be 2 percent unless underdrain is installed. If underdrains are installed, the minimum grade shall be 0.5 percent.
- B. Basin side slopes shall not be steeper than 4:1 or flatter than 10:1
- C. Dry detention basins shall be designed to drain completely within 24 hours after the storm event.
- D. Forebays shall be used to the maximum extent practical to prevent concentrated flow from entering the basin and allow sediment to settle prior to entering the basin.
 - (i) Forebay area should be 10 to 25 percent of the basin's surface area.
 - (ii) Length-to-width ratio shall be at least 2:1.
 - (iii) The forebay shall be located opposite of the basin's outlet to increase detention time.
- E. The basin shall be designed with an emergency spillway designed to convey the 100-year peak discharge entering the basin.
- F. The basin shall have a ponding depth of less than 10 feet, with at least 1 foot of freeboard above the 100-year flood elevation or emergency spillway elevation, whichever is higher.

- G. The basin shape should be designed with a length-to-width ratio of 3:1 in either a long narrow shape or a teardrop shape, to the maximum extent practical.
- H. The basin shall be seeded with vegetation that is tolerant of inundation.
- I. The basin outlet structure shall discharge to a stable outlet.

3. Storm Sewers

- A. Unless otherwise approved by the Building Inspector, all storm sewer in the public right-of-way (R/W) shall be constructed of reinforced concrete pipe of appropriate class for the expected loading. Storm sewer materials outside of the R/W shall be subject to approval of the Building Inspector.
- B. The minimum allowable pipe diameter shall be 12 inches.
- C. Sewer grades shall be designed so that, in general, a minimum of 3-foot cover is maintained over the top of the pipe. The developer shall consider elliptical pipe to increase the amount of available cover beneath roadways and driveways. Pipe cover less than the minimum may be used upon site-specific approval by the Building Inspector. Uniform slopes shall be maintained between inlets, manholes, and inlet to manhole. Minimum and maximum allowable slopes shall be those capable of producing velocities between 2 and 12 feet per second, respectively, when the sewer is flowing full. Velocities lower than the minimum or higher than the maximum may be used upon site-specific approval by the Building Inspector.
- D. The maximum distance for overland flow of stormwater runoff to an underground storm sewer system shall be 600 feet unless a longer distance is approved by the Building Inspector.
- E. All inlets and catch basins shall be constructed with a 24-inch sump. In bedrock situations, a 12-inch sump would be acceptable. If the drainage area is served by a wet detention pond, then sumps are not necessary.

4. Ditches

- A. Ditch side slopes shall be no steeper than 4:1.
- B. The minimum ditch grade is 1 percent. Ditch grades of less than 1 percent may be allowed but may require ditch underdrains.

- C. Ditches and open channels shall be protected with erosion mat as necessary to prevent erosion. The erosion mat shall be of an approved type and application specified in the “Erosion Control Product Acceptability List,” most current revision, by the WisDOT.

5. Culverts

- A. Culverts and similar structures shall have a capacity that meets or exceeds the capacity of the surface drainageway and shall be a minimum of 18 inches in diameter for culverts under roadways and 15 inches for culverts under private entrances. The flowline of a culvert shall match the flowline of the surface drainage way. Submitted plans shall indicate the sizes for all culverts including the opening size of culverts for private entrances.
- B. No plastic culvert piping is allowed, unless approved by the Building Inspector.
- C. A minimum of **2 feet** of cover (measured as top of pipe to top of pavement surface) shall be maintained over culverts under private entrances. A minimum of **1.7 feet** of cover (measured as top of pipe to top of pavement surface at centerline of roadway) shall be maintained over culverts under roadways. If these cover standards cannot be met, backfill around and over the culverts shall be slurry backfill or ready-mix concrete according to the Town’s specifications. The developer shall consider pipe arches and elliptical pipe to increase the amount of available cover beneath roadways and driveways. The developer shall consider ductile iron pipe for structural integrity, if necessary.
- D. Culvert backfill shall be compacted granular fill material. Culverts shall be properly bedded.
- E. Culverts shall not create backwater that adversely impacts upstream properties. Design of new culverts shall consider impacts of future upstream development.
- F. End sections shall be provided for all culverts. Grates/trash racks shall be required on end sections for all culverts greater than 18 inches in diameter on both ends of the pipe.
- G. A culvert permit must be obtained for all culverts prior to installation. The culvert permit application is available on the Town’s website. For temporary culverts, please contact the Building Inspector for more information. The Town installs and removes temporary culvert’s at owner’s expense.

6. Infiltration Practices

The need for, applicability of and design of infiltration practices shall be in conformance with Technical Standards and supporting guidelines published by the DNR.

(d) Best Management Practice (BMP) Design Standards.

1. The design, installation and maintenance of all BMPs used to meet the requirements of this ordinance shall comply with the technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under subchapter V of ch. NR 151, Wis. Adm. Code.
2. Where BMP standards have not been identified or developed under sub. 1 above, the Building Inspector may approve the use of other available standards, such as those from other states or the USDA-Natural Resources Conservation Service.

(e) Technical Guidelines. The Town may adopt technical guidelines to facilitate the consistent administration of certain provisions of this ordinance. The Town will seek the expertise and input from Waukesha County and other agencies in the development and maintenance of technical guidelines under this subsection.

Note: Examples of technical guidelines that Waukesha County has published include sample storm water BMP maintenance agreements, channel & slope stabilization design charts, hydrology and BMP design data summary tables, as-built survey specifications, outlet design guidance, sample cross-sections, basement wetness and flooding protection standards, and sample storm water management plan documents.

(f) Construction Specifications. The construction or installation of all BMPs and BMP components shall comply with all applicable manufacturers and industry standards and specifications, including but not limited to those published by ASTM and the USDA - Natural Resources Conservation Service (NRCS).

(g) Soil Evaluations. All soil profile evaluations and forms submitted for review by the Building Inspector under the provisions of this ordinance shall be completed in accordance with Chapter COMM 85 Wis. Admin. Code and any applicable standards under sub. (b) above. Where there are no specific standards for the number, location or depth of soil profile evaluations for a proposed BMP, the Building Inspector shall determine the minimum requirements based on the design of the BMP and the likely variability of the on-site soils.

(h) Availability. Copies of all technical references made in this section shall be available for review and distribution through the office of the Town Clerk during normal business hours, or over the Internet. Fees may be charged for hard copies of these items.

(i) Future Revisions or Updates. The technical references in this section are made a part of this ordinance and shall be updated periodically in order to keep current with field experiences, research, technological advances and the

development of related technical standards by other agencies and units of government. Any future revisions of the documents incorporated herein are also made part of this ordinance unless otherwise acted upon by the Town.

Sec. 26-343. Maintenance of Storm Water BMPs.

(a) **Maintenance Agreement Required.** A maintenance agreement shall be required for all permanent storm water BMPs installed to comply with the requirements of this ordinance. The maintenance agreement shall be independent of all other restrictions or covenants and shall comply with all provisions of this section.

(b) **Agreement Provisions.** The maintenance agreement shall, at a minimum, contain the following information and provisions:

1. **Ownership.** Identification of the owner(s) of the land parcel(s) where the storm water BMP(s) is located. Ownership shall be the same as those assigned maintenance responsibilities under sub. 6. below, unless otherwise designated in a regional storm water management plan and approved by the applicable unit(s) of government. For new land divisions, all storm water BMPs that collect runoff from more than one lot shall be located on outlots. For all privately owned outlots, ownership shall be by proportional undividable interest for all properties that are within the control of the applicant and drain to the BMP. However, the applicant may combine ownership of more than one BMP within the site;
2. **Location.** A legal description and survey map of the storm water BMP location(s), showing associated drainage or access easements required to maintain the BMP;
3. **Design.** Detailed drawings of each storm water BMP and a general description of its purpose and design, including but not limited to BMP dimensions and elevations, inlet and outlet designs and elevations and the drainage area served by the BMP. If possible, use as-built survey information.

Note: *As-built information may not yet be available for new land divisions, depending on the timing of recording. In this case, use design information. See sub. (c)3. below for details on recording procedures.*

4. **Maintenance plan.** A description of all long term maintenance activities that will likely be required for each BMP included in the agreement, and an estimated time interval between each activity;
5. **Access.** Authorization for vehicle access, including a minimum 15-foot wide access easement dedicated to the local municipality and connecting to a public road right-of-way, to allow for future BMP maintenance work. The access easement shall be of adequate soil conditions or surfacing to withstand loads produced by standard construction equipment, and shall not

include any area where channelized flow of runoff occurs or where storm water may pond to a depth greater than six (6) inches during a 100-year, 24-hour design storm.

6. Maintenance responsibility. Identification of the person(s), organization, municipality or other entity responsible for long-term maintenance of the storm water BMP. The assignment of maintenance responsibilities for a privately owned storm water BMP shall, at a minimum, include all properties that are within the control of the applicant and drain to the BMP. However, the applicant may combine the maintenance responsibilities of more than one BMP within the site;
7. Inspections. Authorization for access to the property by representatives of the Town or their designee to conduct inspections of the BMP, monitor its performance and maintenance, and notify the designated entity when maintenance or repair activities are necessary. A statement shall also be included that says, upon written notification by the Town or their designee, that the entity under sub. 6. above shall, at their own cost and within a reasonable time period, have a BMP inspection conducted by a qualified professional, file a report and complete any maintenance or repair work recommended in the report;
8. Municipal maintenance. Authorization for the Town or their designee to carry out any maintenance activities and associated inspections if the entity identified under par. 6 above does not perform the required activity within the specified time period in the notification or if the Town does not accept the work conducted by the designated entity;
9. Special charge. A statement that the Town may exercise their statutory authority to levy and collect a special charge pursuant to s. 66.0627 Wisconsin Statutes, for any services carried out relating to sub. 7 or 8 above;
10. Binding agreement. A statement confirming that the entire agreement shall remain binding on all subsequent owners of the property upon which the storm water BMP is located and that the restrictions shall run with the land and on any other property which is subject to maintenance responsibility in the agreement.
11. Agreement modifications. Sole authorization for the Town to modify the provisions of the agreement upon 30-day notice to the current owner(s) and other parties responsible for maintenance of the storm water BMP. Any changes made to the agreement shall maintain the minimum items listed in this subsection and ensure the long term maintenance of the BMP;
12. Other. Other information as determined to be necessary by the Building Inspector to ensure compliance with this ordinance.

Note: Many of the above noted activities may be carried out in accordance with an intergovernmental working agreement under s. 66.30 Wisconsin Statutes

(c) Agreement Form, Approval and Recording.

1. **Form.** The Building Inspector shall provide the applicant with sample maintenance agreement forms that comply with the requirements of this section.
2. **Approval.** The Building Inspector shall review and approve the form and content of all maintenance agreements proposed under this ordinance and ensure compliance with all provisions of this section. If the agreement does not comply, the Building Inspector shall notify the applicant what changes are needed in order to comply, in accordance with the plan review procedures in sec. 26-334(f) above.
3. **Recording.** Upon certification of compliance with subs. 1. and 2. above by the Building Inspector, the maintenance agreement shall be recorded at the Waukesha County Register of Deeds referencing any plat, certified survey or other ownership transfer device pertaining to land which contains the subject storm water BMP or is subject to maintenance responsibility in the approved agreement. For new land divisions, the recording of the maintenance agreement shall occur simultaneously with the recording of the land division. However, no storm water BMP maintenance agreement shall be recorded prior to Building Inspector approval. The Building Inspector may require that the agreement be recorded by Town staff.
4. **Copy.** The permit holder shall provide a copy of the recorded agreement, including evidence of the actual recording(s), to the Building Inspector as a condition of release of the financial assurance under sec. 26-335(c) above.

(d) Maintenance Responsibilities Prior to a Maintenance Agreement. The permit holder and other responsible party shall be responsible for the maintenance of all storm water BMPs prior to permit termination under sec. 26-333(b).

Sec. 26-344. Illicit Discharges.

(a) Prohibitions.

1. **Discharges.** Except for storm water and other discharges specifically exempted under sub. (b) below, no discharge, spilling or dumping of substances or materials shall be allowed into receiving water bodies or onto driveways, sidewalks, parking lots or other areas that drain into the *storm drainage system*.
2. **Connections.** The construction, use, maintenance or continued existence of *illicit connections* to the storm drainage system is prohibited. This prohibition

expressly includes, without limitation, illicit connections made prior to the adoption of this ordinance, regardless of whether the connection was permissible under law or practice applicable or prevailing at the time of connection.

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

1. Discharges authorized by a permit issued by the Wisconsin Department of Natural Resources.
2. Discharges resulting from fire fighting activities.
3. Discharges from uncontaminated ground water, potable water source, roof drains, foundation drain and sump pump, air conditioning condensation, springs, lawn watering, individual residential car washing, water main and hydrant flushing and swimming pools if the water has been dechlorinated.

(c) **Notice of Violation.** Whenever the Building Inspector finds a violation of this section, the Building Inspector may order compliance by written notice of violation to the responsible party. Such notice may require without limitation:

1. The elimination of illicit connections or discharges;
2. That violating discharges, practices, or operations shall cease and desist;
3. The abatement or remediation of storm water pollution or contaminated hazards and the restoration of any affected property;
4. Any responsible party that fails to comply with a notice of violation under this section, shall be subject to further enforcement action under the provisions of sec. 26-345 below.

Sec. 26-345. Enforcement.

(a) **Prohibited Practices.** Not complying with any requirement of this ordinance shall be deemed a violation, and shall subject the responsible party to enforcement action under this section. Prohibited practices shall include but not limited to the following:

1. Commencing any land disturbing or land development activity prior to:
 - A. Obtaining a storm water permit;
 - B. Notifying the Building Inspector a minimum of 2 working days in advance for sites that have obtained a storm water permit; or

- C. Installing those BMPs identified in the approved plans to be installed prior to any land disturbing or land developing activity.
2. Failing to apply for a Building Inspector preliminary storm water review letter in accordance with subsection 26-334(b) of this ordinance.
3. Failing to obtain Building Inspector certification of compliance for a final plat or certified survey map in accordance with subsection 26-334(d) of this ordinance.
4. Failing to comply with all permit conditions, erosion control or storm water management requirements and approved plans in accordance this ordinance.
5. Failing to maintain BMPs until permit termination.
6. Failing to comply with any notice of violation.

(b) Violations. The Building Inspector shall notify the permit holder of any violation in writing, and copy any other known responsible party involved in the violation. The written notice shall be hand delivered to the permit holder or sent to the last known address, with a reasonable attempt to verify that the permit holder received it. The notice shall describe the violation, remedial action(s) needed and a schedule for all remedial action to be completed. Any enforcement measures shall continue until compliance is achieved or as ordered by the court. The Building Inspector is authorized to use the following methods of enforcement in any combination thereof against any applicant or responsible party that is found to be in violation of any provision of this ordinance:

1. Forfeiture. Any violator shall be subject to a forfeiture of not less than \$100 or more than \$1000 plus the cost of prosecution for each violation. Each day that a violation exists shall constitute a separate offense.
2. Stop Work Order. Any violator is subject to an order to stop all work except that which is needed as a corrective action to bring the site into compliance.
3. Permit Revocation. The Building Inspector may revoke a permit issued under this ordinance. Upon loss of the permit, all construction shall cease and the site shall be stabilized, with any costs incurred by the Town to be charged against the financial assurance.
4. Injunction. The Town, or any person affected by activities regulated under this ordinance, may enforce the provisions of this ordinance by a temporary restraining order, injunction and other such relief as a court may order.
5. Declared nuisances. Any land disturbing or land development activity carried out in violation of the provisions of this Ordinance is hereby declared

to be a nuisance *per se*, and the Town may apply to any court of competent jurisdiction to restrain or abate such nuisance.

6. Emergency Action. The Building Inspector may enter upon the property and take any necessary emergency action if the Building Inspector determines that the site in violation is an immediate threat to public health, safety, welfare, the environment or downstream property, or if the permit holder or other violator refuses to take the corrective action as ordered by the Building Inspector. Any cost incurred by the Town as a result of this action shall be billed to the permit holder or other responsible party or subtracted from the financial assurance. The Town shall provide reasonable notice to the permit holder and other responsible party after exercising this authority.
7. Citation.
 - A. The Town elects to also use the citation method of enforcement under Section 66.0113 of the Wisconsin Statutes for violations of this ordinance, including those for which a statutory counterpart exists. The procedures contained in Section 66.0113(3) of the Wisconsin Statutes, relating to the options of an alleged violator and default are adopted and incorporated herein by reference.
 - B. Authority to issue a citation under this ordinance shall be limited to the **Building Inspector** or his/her designee. The authority delegated to such official or employees to issue citations may only be granted or revoked by the Town Board. This subsection does not preclude the Town or any authorized officer from proceeding under any other ordinance or law or by any other enforcement method to enforce any ordinance regulation or order.
 - C. The schedule of cash deposits including penalty assessment, jail assessment, crime lab assessment, drug/law enforcement assessment, any applicable domestic abuse or consumer information assessments or any other assessment applicable by law for use with citations issued under this section shall be as adopted by the Town Board from time to time and such schedule shall be on file in the Town Clerk and Waukesha County Clerk of Court and receipts shall be given for cash deposits. The citation shall contain the following information:
 - (i) The name and address of the alleged violator.
 - (ii) The factual allegations describing the alleged violation.
 - (iii) The time and place of the offense.
 - (iv) The section of the ordinance violated.

- (v) A designation of the offense in such a manner as can be reasonably understood by a person making a reasonable effort to do so.
- (vi) The time at which the alleged violator may appear in court.
- (vii) A statement which, in essence, informs the alleged violator:
 - 1. That a cash deposit based on the schedule established by the Town Board, from time to time, and on file in the office of the Town Clerk, be made to and deposited with the Town Clerk or Waukesha County Clerk of Court prior to the time of the scheduled court appearance.
 - 2. That if a deposit is made, no appearance in court is necessary unless he is subsequently summoned or the citation requests a court appearance.
 - 3. That if a cash deposit is made and the alleged violator does not appear in court, he will be deemed to have entered a plea of no contest and submitted to a forfeiture, a penalty assessment, a jail assessment crime lab assessment and drug/law enforcement assessment and any applicable domestic abuse or consumer information assessments of, if the court does not accept the plea of no contest, a summons will be issued commanding him or her to appear in court to answer the complaint.
 - 4. That if no cash deposit is made and the alleged violator does not appear in court at the time specified, the court may issue a summons or a warrant for the defendant's arrest or consider the nonappearance to be a plea of no contest and enter judgment or an action may be commenced to collect the forfeiture, penalty assessment, jail assessment, crime lab assessment and drug/law enforcement assessment and any applicable domestic abuse or consumer information assessments.
 - 5. That if the court finds that the violation involves an ordinance that prohibits conduct that is the same as or similar to conduct prohibited by state statute punishable by fine or imprisonment or both, and that the violation resulted in damage to the property of or physical injury to a person other than the alleged violator, the court may summon the alleged violator into court to determine if restitution shall be ordered.

- (viii) A direction that if the alleged violator elects to make a cash deposit, the statement which accompanies the citation shall be signed to indicate that the statement required under sub. 7. above has been read. Such statement shall be sent or brought with the cash deposit.
- (ix) Such other information as the Town deems necessary.

(c) Appeals.

1. Authority. The Town Board of Adjustment shall act as the review and appeal authority for any order, requirement, decision or determination by the Building Inspector under this ordinance.
2. Procedure. The rules, procedures, duties and powers of the Board of Adjustment shall be as provided in the Town Code of Ordinances and the provisions of s. 60.65 Wisconsin Statutes shall apply to any review or appeal under this ordinance.
3. Variations. Upon appeal, the Board of Adjustment may authorize variances from the provisions of this ordinance which are not contrary to the public interest or the purposes of this ordinance, and where owing to special conditions beyond the control of the applicant, a literal enforcement of this ordinance will result in unnecessary hardship.
4. Who May Appeal. Appeals to the Board of Adjustment may be taken by any aggrieved person or by an officer, department, board or unit of government affected by any decision of the Building Inspector.

Section 26-346. Validity.

(a) Repeal of conflicting Ordinances.

This ordinance repeals all provisions of an ordinance previously enacted by the Town under s. 60.627 or chapter 236 Wis. Stats. relating to construction site erosion control and storm water management regulations. Wherever there may be a conflict with other Town ordinances relating to erosion control, storm water management or site drainage, or illicit discharges, the more restrictive provision shall apply, as determined by the Building Inspector.

(b) Declaration of severability.

The several sections, subsections and paragraphs of this Ordinance are hereby declared to be severable. If any section, subsection, or paragraph or subparagraph of this Ordinance shall be declared by a decision of a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the other provisions of the Ordinance, or of the section of which the invalid portion or paragraph may be a part.

**APPENDIX D
POST-CONSTRUCTION STORMWATER
MANAGEMENT FACILITIES INVENTORY**

Appendix B
Postconstruction Stormwater Management Facilities Inventory
Town of Brookfield
WPDES Permit Item Part II.F.1.b

Facility ID	Year Constructed	Owner	Facility/Owner Name	Facility Type	Wet/Dry	Location	General Condition	Inspection Frequency	Last Inspection Date	Inspection Results	Date of Last Maintenance	Date of Next Scheduled Maintenance	WPDES Permit Map Basin ID	Modeled in Existing Conditions?	SWMA	Comments	Potential Retrofit
1	1980's	Town	Meadows of Polar Creek Pond (East)	Pond	Wet	Lake Spur Drive and Janquil Court Intersection	To Be Determined	Once Every Two Years	---	---	---	To Be Determined	PC-52	Yes	N/A	Town Owned	N/A
2	1980's	Town	Meadows of Polar Creek Pond (North)	Pond	Wet	Lake Spur Drive and Janquil Court Intersection	To Be Determined	Once Every Two Years	---	---	---	To Be Determined	PC-50	Yes	N/A	Town Owned	N/A
3	1970's	Town	Brook Park Pond (2 Ponds)	Pond	Wet	Brook Park - Brook Park Dive and Gray Fox Drive Intersection	To Be Determined	Once Every Two Years	---	---	2009	To Be Determined	HR-10 and HR-13	Yes	N/A	Town Owned	N/A
4	1988-89	Town	Wray Park Pond (2 Ponds)	Pond	Wet	Wray Park - Jaclyn Drive and Mary Lyn Court Intersection	To Be Determined	Once Every Two Years	---	---	---	To Be Determined	PC-64	Yes	N/A	Town Owned	N/A
5	1980's	Town	Crossroads Corporate Centre	Pond	Wet	Swenson Drive and Crossroads Circle Intersection	To Be Determined	Once Every Two Years	---	---	---	To Be Determined	PC2-1a	Yes	N/A	Town Owned	N/A
6	N/A	County	Barker Road Basin	Pond	Wet	1,200 Feet North of Barker Road and Greenfield Avenue Intersection	N/A	N/A	N/A	N/A	N/A	N/A	PC1-9	No	N	Potential for SW Maintenance Agreement	N/A
7	N/A	WisDOT	I-94 Cloverleaf Basin	Pond	Dry	Swenson Drive and I-94 (Eastbound On-Ramp)	N/A	N/A	N/A	N/A	N/A	N/A	PC2-5	No	N	Potential for SW Maintenance Agreement	Yes
8	N/A	City of Brookfield	Harmony Circle	Pond	Wet	Camelot Park and South Termini of Harmony Circle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N	Potential for SW Maintenance Agreement	N/A
9	N/A	City of Waukesha	Home Depot	Pond	Wet	Home Depot on Bluemound Road (City of Waukesha)	N/A	N/A	N/A	N/A	N/A	N/A	HR-4	No	N	Potential for SW Maintenance Agreement	N/A
10	N/A	Private	Greystone Condominiums	Pond	Dry	Southeast of Mary Rose Court and West Wisconsin Avenue Intersection	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N	Outside Town Limits, potential for SW Maintenance Agreement	Yes
11	N/A	Private	Brookfield Lakes Condo Pond (North)	Pond	Wet	Brookfield Lake Drive and Brookfield Lake Court Intersection	N/A	N/A	N/A	N/A	N/A	N/A	DC-14	No	N	Potential for SW Maintenance Agreement	N/A
12	N/A	Private	Brookfield Lakes Condo Pond (Central)	Pond	Wet	Follet Drive and Kirkam Court Intersection	N/A	N/A	N/A	N/A	N/A	N/A	DC-16	No	N	Potential for SW Maintenance Agreement	N/A
13	N/A	Private	Brookfield Lakes Condo Pond (South)	Pond	Wet	Follet Drive and Brookfield Road Intersection	N/A	N/A	N/A	N/A	N/A	N/A	DC-18	No	N	Potential for SW Maintenance Agreement	N/A
14	N/A	Private	Elmbrook Church	Pond	Wet	Barker Road and Davidson Drive Intersection	N/A	N/A	N/A	N/A	N/A	N/A	PC-21	No	N	Potential for SW Maintenance Agreement	N/A
15	N/A	Private	Elmbrook Church	Pond	Dry	Barker Road and Davidson Drive Intersection	N/A	N/A	N/A	N/A	N/A	N/A	PC-21	No	N	Potential for SW Maintenance Agreement	Yes
16	N/A	Private	Brook Hill Estates IV	Pond	Dry	Ridge Road and Stonefield Court Intersection	N/A	N/A	N/A	N/A	N/A	N/A	F-12	No	N	Potential for SW Maintenance Agreement	Yes
17	N/A	Private	Brook Hill Estates III	Pond	Dry	S Springfield Road and Peterhill Court Intersection	N/A	N/A	N/A	N/A	N/A	N/A	F-11	No	N	Potential for SW Maintenance Agreement	Yes
18	N/A	Private	Wisconsin Athletic Club	Pond	Wet	Water Tower Road Termini	N/A	N/A	N/A	N/A	N/A	N/A	PC-31	No	N	Potential for SW Maintenance Agreement	N/A
19	2007	Private	Marcus Majestic Theatre	Pond	Wet	Marcus Theatre on Springdale Road (City of Waukesha)	N/A	N/A	N/A	N/A	N/A	N/A	F-41	No	N	Outside Town Limits, potential for SW Maintenance Agreement	N/A
20	2007	Private	Marcus Majestic Theatre	Pond	Dry	Marcus Theatre on Springdale Road (City of Waukesha)	N/A	N/A	N/A	N/A	N/A	N/A	F-41	No	N	Outside Town Limits, potential for SW Maintenance Agreement	Yes
21	N/A	Private	Kmart	Pond	Dry	Rear of Kmart Lot - 1,000 Feet West of Brookfield Road and Bluemound Road Intersection	N/A	N/A	N/A	N/A	N/A	N/A	N/A (Drains to Adjacent MS4)	No	N	Potential for SW Maintenance Agreement	Yes
22	N/A	Private	Sams Club	Underground Storage	N/A	Intersection of Springdale Road and West Bluemound Road (CTH J)	N/A	N/A	N/A	N/A	N/A	N/A	F-40	No	N		N/A
23	N/A	Private	Brookfield Highlands Apartments	Pond	Dry	Intersection of Davidson Drive and George Hunt Circle (west)	N/A	N/A	N/A	N/A	N/A	N/A	PC-20a	No	N	Potential for SW Maintenance Agreement	Yes
24	N/A	Private	Brookfield Commerce Center	Pond	Dry	Industrial Park at intersection of Watertown Road and Springdale Road	N/A	N/A	N/A	N/A	N/A	N/A	F-55	No	N	Potential for SW Maintenance Agreement	Yes
25	2010	Private	Toldt Woods/Madeline Square	Pond	Wet	West end of Toldt Woods Drive within the Toldt Woods/Madeline Square Development	N/A	N/A	N/A	N/A	N/A	N/A	PC4-6	No	N	Potential for SW Maintenance Agreement	Yes
26	2008	Private	Janacek Court LLC	Pond	Wet	Intersection of Janacek Road and Janacek Court	N/A	N/A	N/A	N/A	N/A	N/A	PC3-4	No	N	Potential for SW Maintenance Agreement	N/A

Appendix B
Postconstruction Stormwater Management Facilities Inventory
Town of Brookfield
WPDES Permit Item Part II.F.1.b

Facility ID	Year Constructed	Owner	Facility/Owner Name	Facility Type	Wet/Dry	Location	General Condition	Inspection Frequency	Last Inspection Date	Inspection Results	Date of Last Maintenance	Date of Next Scheduled Maintenance	WPDES Permit Map Basin ID	Modeled in Existing Conditions?	SWMA	Comments	Potential Retrofit
27	2008	Private	Brookfield Trails	Pond	Wet	Elizabeth Court Termini	N/A	N/A	N/A	N/A	N/A	N/A	PC-46b	No	N	Potential for SW Maintenance Agreement	N/A
28	2010	Private	Brookton Place	Rain Garden	N/A	400 Feet West of the Intersection of Woefel Road and Wisconsin Avenue	N/A	N/A	N/A	N/A	N/A	N/A	N/A (Drains to Adjacent MS4)	No	N	Potential for SW Maintenance Agreement	Yes
29	2009	Private	Mallards Landing	Pond	Wet	475 Feet North of the Intersection of Watertown Road and Barker Road	N/A	N/A	N/A	N/A	N/A	N/A	PC-45	No	N	Potential for SW Maintenance Agreement	N/A
30	2009	Private	Dr. Michelle Bonnes Clinic	Pond	Wet	Intersection of Barker Road and Greenfield Avenue	N/A	N/A	N/A	N/A	N/A	N/A	PC-25	No	N	Potential for SW Maintenance Agreement	N/A
31	2008	Private	Lexus of Brookfield	Pond	Wet	Janacek Court	N/A	N/A	N/A	N/A	N/A	N/A	PC3-4	No	N	Potential for SW Maintenance Agreement	N/A
32	2010	Private	Acura of Brookfield	Pond	Wet	Bleumound Frontage Road, 1,200 Feet of the Intersection of Brookfield Road and Bluemound Road	N/A	N/A	N/A	N/A	N/A	N/A	PC3-2	No	N	Potential for SW Maintenance Agreement	N/A
33	1999	Private	Forestwalk Condominiums	???	???	Wisconsin Avenue, 1,000 Feet West of Wisconsin Avenue and Woefel Road Intersection	N/A	N/A	N/A	N/A	N/A	N/A	N/A (Drains to Adjacent MS4)	No	N	Potential for SW Maintenance Agreement	???
34	N/A	Private	Badger Lighting and Signs	Underground Storage	N/A	Janacek Court	N/A	N/A	N/A	N/A	N/A	N/A	PC3-4	No	N		N/A
35	N/A	Private	Crossroads Corporate Centre XIV	Pond	Dry	Water Tower Road	N/A	N/A	N/A	N/A	N/A	N/A	PC-31	No	N	Potential for SW Maintenance Agreement	Yes
36	2006	Private	Eagles Nest Condominiums	Pond	Wet	West side of the Brookfield Road and Follet Drive Intersection	N/A	N/A	N/A	N/A	N/A	N/A	DC-26	No	N	Potential for SW Maintenance Agreement	N/A
37	1997	Private	Homestead Suites	Underground Storage	N/A	Brookfield Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N		N/A
38	2010	Private	Toldt Woods/Madeline Square	Pond	Dry	West end of Toldt Woods Drive within the Toldt Woods/Madeline Square Development	N/A	N/A	N/A	N/A	N/A	N/A	PC4-6	No	N	Potential for SW Maintenance Agreement	Yes
39	2012	Private	Assisted Living	Pond	Wet	SW corner of Wisconsin Avenue and Woefel Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		N/A
40	2012	Private	Assisted Living	Internally Drained	N/A	SW corner of Wisconsin Avenue and Woefel Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		N/A
41	2014	Private	Self Storage of Goerke's Corners	Bioretention	N/A	SW corner of Watertown Road and Doral Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		N/A
42	2015	Private	Brookdale Place	Pond	Wet	SE corner of Wisconsin Avenue and Woefel Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		N/A
43	2015	Private	Brookdale Place	Pond	Dry	SE corner of Wisconsin Avenue and Woefel Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		No
44	2015	Private	The Corners	Underground Storage	Wet	South of Jennifer Drive and Bluemound Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		No
45	2015	Private	The Corners	Underground Storage	Wet	South of Jennifer Drive and Bluemound Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		No
46	2015	Private	The Corners	Underground Storage	Wet	South of Jennifer Drive and Bluemound Road	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		No
47	2015	Private	Home2Suites Hotel	Pond	Wet	Termini of Larry Court	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		N/A
48	2015	Private	Home2Suites Hotel	Pond	Dry	Termini of Larry Court	N/A	N/A	N/A	N/A	N/A	N/A		No	Y		No

APPENDIX E
WATER MAIN BREAK AND TESTING POLLUTION PREVENTION PLAN

Report for
Town of Brookfield, Wisconsin

Water Main Break and Testing Pollution Prevention Plan

Prepared by:

STRAND ASSOCIATES, INC.®
910 West Wingra Drive
Madison, WI 53715
www.strand.com

March 2016



Purpose:

The Town of Brookfield (Town) has prepared the following water main break and testing plan. This report is prepared in compliance with the conditions of the NR 216 permit pursuant to Part II, Section F 10, of Wisconsin Pollutant Discharge Elimination System (WPDES) Permit Issuance No. WI-S0501053. This report provides a plan to control sediment and other pollutants from reaching waters of the state.

A. Contact Information

- a. Tony Skof, Supervisor
Town of Brookfield Sanitary District No. 4
150 South Barker Road
Brookfield, WI 53045
Phone: (262) 798-8629

- b. Gary Lake, Development Services Administrator
Town of Brookfield Building and Zoning Administration Department
645 North Janacek Road
Brookfield, WI 53045
Phone: (262) 796-3790

B. Standard Operating Procedure

- a. Water main break
 - 1. Find and control the break. Valve off if possible, or at least valve down.
 - 2. Place barricades around the break area.
 - 3. Install erosion control practices downslope of break location prior to start of construction activity.
 - 4. Contact Town of Brookfield Police Dept. and make them aware of the problem.
 - 5. If the break is causing traffic problems i.e. freezing call the Highway Dept.
 - 6. Direct trench de-watering to in-place erosion control measures.
 - 7. If the repair must be made immediately call Globe Contractors.
 - 8. If we have lost a significant amount of water and lost pressure to 25% of the service area, notify the customers and the WDNR and super chlorinate and flush until safe samples are achieved.
 - 9. Remove all erosion control and restore site.

b. Testing During Construction

1. Direct flows to erosion control measures in-place as part of construction project.
2. Install erosion control practices downslope of break location prior to start of construction activity.
3. Direct trench de-watering to in-place erosion control measures.
4. Remove all erosion control and restore site.

C. Internal Training

SD #4 employees receive training on a regular basis as part of the SD #4 monthly meeting. During these meetings, employees receive instruction and training for illicit discharge detection and reporting, response procedures, and water main break procedures. Employees also attend outside training sessions for various activities such as erosion control.

The WDNR covers testing of new water mains under Hydrostatic Test Water and Water Supply system Water (WI-0057681-4) wastewater general permit. Staff has been made aware of the requirements under this permit.