



# City of Appleton

100 North Appleton Street  
Appleton, WI 54911-4799  
www.appleton.org

## Meeting Agenda - Final Utilities Committee

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Tuesday, March 9, 2021

5:00 PM

Council Chambers, 6th Floor

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1. Call meeting to order

2. Roll call of membership

3. Approval of minutes from previous meeting

[21-0196](#) Approval of the February 9, 2021 Utilities Committee Meeting minutes.

**Attachments:** [February 9, 2021 Utilities Committee Meeting minutes.pdf](#)

4. **Public Hearings/Apearances**

5. **Action Items**

[21-0228](#) Approve 2020 Annual Stormwater Report to WDNR.

**Attachments:** [2020 MS4 Annual Report for UC w attachments.pdf](#)

[21-0238](#) Award of 2021D Stormwater Consulting Services Single Source Contract for Lightning Drive Stream Crossings and Stormwater Practices Final Design to raSmith in an amount not to exceed \$107,000.

**Attachments:** [2021D Lightning Final Design Contract Award Memo to raSmith 03-09-2021 FIN](#)

[21-0239](#) Award of Single Source Contract with NES Ecological Services for 2021 Wetland Delineation Services in an amount not to exceed \$35,639.70

**Attachments:** [2021E Wetland Delineations Contract Award Memo 03-09-2021 Util Cmte Final](#)

[21-0240](#) Award Single Source Unit K-21 Native Landscape Management Contract to Applied Ecological Services, Inc., in an amount not to exceed \$256,680.

**Attachments:** [K-21 contract award util memo 03-09-2021 Final.pdf](#)

[21-0262](#) Award Contract Amendment #1 to AECOM for the America's Water Infrastructure Act Project in the amount of \$22,788.

**Attachments:** [utilities memo - AWIA RRA Memo 03-03-21 \(002\).pdf](#)

## 6. Information Items

[21-0229](#) Discuss Pollution Prevention Program as required by the stormwater permit.

**Attachments:** [2021 Pollution Prevention Program presentation .pdf](#)  
[2021 Pollution Prevention Program with attachments.pdf](#)

[21-0197](#) Monthly Reports for January 2021:  
- Water Distribution and Meter Team Monthly Report

**Attachments:** [Water Main Breaks January 2021.pdf](#)

## 7. Adjournment

*Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.*

*Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.*

*For questions on the agenda, contact Chris Shaw at 920-832-5945 or Paula Vandehey at 920-832-6474.*



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## Meeting Minutes - Final Utilities Committee

---

Tuesday, February 9, 2021

5:00 PM

Council Chambers, 6th Floor

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1. Call meeting to order

*Chairperson Meltzer called the Utilities Committee Meeting to order at 5:00 p.m.*

2. Roll call of membership

**Present:** 5 - Meltzer, Fenton, Otis, Prohaska and Smith

3. Approval of minutes from previous meeting

[21-0139](#)

Approval of the January 26, 2021 Utilities Committee Meeting minutes.

**Attachments:** [January 26, 2021 Utilities Committee Meeting Minutes.pdf](#)

**Smith moved, seconded by Prohaska, that the Minutes be approved. Roll Call.  
Motion carried by the following vote:**

**Aye:** 5 - Meltzer, Fenton, Otis, Prohaska and Smith

4. **Public Hearings/Appearances**

5. **Action Items**

[21-0143](#)

Award sole source purchase of Water Plant High Service Pump #5 Variable Frequency Drive (VFD) equipment and commissioning services to Werner Electric in the amount of \$49,794.

**Attachments:** [210204 UC Memo High Lift Service Pump 5 VFD.pdf](#)

**Prohaska moved, seconded by Fenton, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:**

**Aye:** 5 - Meltzer, Fenton, Otis, Prohaska and Smith

6. **Information Items**

7. Adjournment

**Smith moved, seconded by Prohaska, that the Utilities Committee Meeting be adjourned at 5:07 p.m.. Roll Call. Motion carried by the following vote:**

**Aye:** 5 - Meltzer, Fenton, Otis, Prohaska and Smith

# Submittal of Annual Reports and Other Compliance Documents for Municipal Separate Storm Sewer System (MS4) Permits

NOTE: Missing or incomplete fields are highlighted at the bottom of each page. You may save, close and return to your draft permit as often as necessary to complete your application. After 120 days your draft is **deleted**.

## Reporting Information

Will you be completing the Annual Report or other submittal type?  Annual Report  Other

**Project Name:**

**County:**

**Municipality:**

**Permit Number:**

**Facility Number:**

**Reporting Year:**

Is this submittal also satisfying an Urban Nonpoint Source Grant funded deliverable?  Yes  No

## Required Attachments and Supplemental Information

Please complete the contents of each tab to submit your MS4 permit compliance document. The information included in this checklist is necessary for a complete submittal. A complete and detailed submittal will help us review about your MS4 permit document. To help us make a decision in the shortest amount of time possible, the following information must be submitted:

### Annual Report

- Review related web site and instructions for [Municipal storm water permit eReporting](#) [Exit Form]
- Complete all required fields on the annual report form and upload required attachments
- Attach the following other supporting documents as appropriate using the attachments tab above
  - Public Education and Outreach Annual Report Summary
  - Public Involvement and Participation Annual Report Summary
  - Illicit Discharge Detection and Elimination Annual Report Summary
  - Construction Site Pollution Control Annual Report Summary
  - Post-Construction Storm Water Management Annual Report Summary
  - Pollution Prevention Annual Report Summary
    - Leaf and Yard Waste Management
    - Municipal Facility (BMP) Inspection Report
    - Municipal Property SWPPP
    - Municipally Property Inspection Report
    - Winter Road Maintenance
  - Storm Sewer Map Annual Report Attachment
  - Storm Water Quality Management Annual Report Attachment
  - TMDL Attachment
  - Storm Water Consortium/Group Report

- Municipal Cooperation Attachment
- Other Annual Report Attachment
  
- Attach the following permit compliance documents as appropriate using the attachments tab above
  - Storm Water Management Program (*S050075-03 General Permit and S058416-04 Madison Area Group Permit shall have a written storm water management program that describes in detail how the permittee intends to comply with the permit requirements for each minimum control measure. Updated programs are due to the department by March 31, 2021.*)
    - Public Education and Outreach Program
    - Public Involvement and Participation Program
    - Illicit Discharge Detection and Elimination Program
    - Construction Site Pollutant Control Program
    - Post-Construction Storm Water Management Program
    - Pollution Prevention Program
      - Municipal Storm Water Management Facility (BMP) Inventory (*S050075-03 General Permit and S058416-04 Madison Area Group Permit 2.6.1 - inventory due to the department by March 31, 2021.*)
      - Municipal Storm Water Management Facility (BMP) Inspection and Maintenance Plan (*S050075-03 General Permit and S058416-04 Madison Area Group Permit 2.6.2 – document due to the department by March 31, 2021.*)
  - Total Maximum Daily Load documents (*\*If applicable, see permit for due dates.*)
    - TMDL Mapping\*
    - TMDL Modeling\*
    - TMDL Implementation Plan\*
    - Fecal Coliform Screening Parameter \*
    - Fecal Coliform Inventory and Map (*S050075-03 general permittees Appendix B B.5.2 – document due to the department by March 31, 2022*)
    - Fecal Coliform Source Elimination Plan (*S050075-03 general permittees Appendix B - document due to the department by October 31,2023*)
  
- Sign and Submit form

**Municipal Contact Information- Complete**

**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 (Department) by March 31 of each year to report on activities for the previous calendar year ("reporting year"). This form is being provided by the Department for the user's convenience for reporting on activities undertaken in each reporting year of the permit term. 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.].

**Note:** Compliance items must be submitted using the Attachments tab.

**Municipality Information**

**Name of Municipality:** Appleton City

**Facility ID # or (FIN):** 31098

**Updated Information:**  Check to update mailing address information

**Mailing Address:** 100 North Appleton Street

**Mailing Address 2:**

**City:** Appleton

**State:** Wisconsin

**Zip Code:** 54911 xxxxx or xxxxx-xxxx

**Primary Municipal Contact Person (Authorized Representative for MS4 Permit)**

The "Authorized Representative" or "Authorized Municipal Contact" includes the municipal official that was charged with compliance and oversight of the permit conditions, and has signature authority for submitting permit documents to the Department (i.e., Mayor, Municipal Administrator, Director of Public Works, City Engineer).

Select to **create new** primary contact

**First Name:** Paula

**Last Name:** Vandehey

Select to **update** current contact information

**Title:** Public Works Dir

**Mailing Address:** 100 N Appleton Street

**Mailing Address 2:**

**City:** Appleton

**State:** WI

**Zip Code:** 54911 xxxxx or xxxxx-xxxx

**Phone Number:** 920-832-6474 Ext: xxx-xxx-xxxx

**Email:** paula.vandehey@appleton.org

**Additional Contacts Information (Optional)**

I&E Program

**Individual with responsibility for:  
(Check all that apply)**

- IDDE Program
- IDDE Response Procedure Manual
- Municipal-wide Water Quality Plan
- Ordinances
- Pollution Prevention Program
- Post-Construction Program
- Winter roadway maintenance

**First Name:**

**Last Name:**

**Title:**

**Mailing Address:**

**Mailing Address 2:**

**City:**

**State:**

**Zip Code:**  xxxxx or xxxxx-xxxx

**Phone Number:**  Ext:  xxx-xxx-xxxx

**Email:**

1. Does the municipality rely on another entity to satisfy some of the permit requirements?

Yes  No

Public Education and Outreach Northeast Wisconsin Stormwater Consortium and Fox Wolf Watershed Alliance (NEWSC and FWWA)

Public Involvement and Participation Northeast Wisconsin Stormwater Consortium and Fox Wolf Watershed Alliance (NEWSC and FWWA)

Illicit Discharge Detection and Elimination OMNNI Associates

Construction Site Pollutant Control raSmith and Brown and Caldwell

Post-Construction Storm Water Management raSmith and Brown and Caldwell

Pollution Prevention

2. Has there been any changes to the municipality's participation in group efforts towards permit compliances (i.e., the municipality has added or dropped consortium membership)?

Yes  No

**Missing Information**

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7.

**Minimum Control Measures- Section 1 : Complete**

**1. Public Education and Outreach**

a. Complete the following information on Public Education and Outreach Activities related to storm water. Select the Delivery Mechanism that best describes how the topics were conveyed to your population. Use the Add Event to add additional entries.

<b>Event Start Date</b>	6/10/2020		
<b>Project/Event Name</b>	DPW Newsletter		
<b>Delivery Mechanism</b>	Distribution of print media		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	101 +	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	1/2/2020		
<b>Project/Event Name</b>	One -on- One communication		
<b>Delivery Mechanism</b>	Other		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input checked="" type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input checked="" type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Businesses <input checked="" type="checkbox"/> Contractors <input checked="" type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No



<b>Event Start Date</b>	1/1/2020		
<b>Project/Event Name</b>	Stormwater Utility Pledge Supporter and Rain Barrel Credits		
<b>Delivery Mechanism</b>	Other		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input checked="" type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	5/1/2020		
<b>Project/Event Name</b>	NEWSC posters at various City Parks		
<b>Delivery Mechanism</b>	Signage		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> Illicit discharge detection and elimination <input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input checked="" type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input checked="" type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	51-100	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	1/2/2020		
<b>Project/Event Name</b>	FWWA Conference Planning and sponsorship		
<b>Delivery Mechanism</b>	Educational activity*		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> Illicit discharge detection and elimination <input type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing	<input type="checkbox"/> General Public <input checked="" type="checkbox"/> Public Employees <input type="checkbox"/> Residents	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

<input type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input checked="" type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input checked="" type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input checked="" type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other		
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<b>Event Start Date</b>	1/2/2020
<b>Project/Event Name</b>	NEWSC School presentations
<b>Delivery Mechanism</b>	Targeted group training* <span style="float: right;">*Active</span>

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> Illicit discharge detection and elimination <input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input type="checkbox"/> Yard waste management/pesticide and fertilizer application <input checked="" type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	51-100	<input checked="" type="radio"/> Yes <input type="radio"/> No

<b>Event Start Date</b>	1/2/2020
<b>Project/Event Name</b>	NEWSC exhibiting
<b>Delivery Mechanism</b>	Informational booth* <span style="float: right;">*Active</span>

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	51-100	<input checked="" type="radio"/> Yes <input type="radio"/> No

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<b>Event Start Date</b>	1/2/2020
<b>Project/Event Name</b>	Development Meetings and Plan Review
<b>Delivery Mechanism</b>	Other <span style="float: right;">*Active</span>

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> Illicit discharge detection and elimination <input type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input checked="" type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input checked="" type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input type="checkbox"/> Residents <input checked="" type="checkbox"/> Businesses <input checked="" type="checkbox"/> Contractors <input checked="" type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

**b. Brief explanation on Public Education and Outreach reporting. *Limit response to 250 characters and/or attach supplemental information on the attachments page.***

2020 Activities limited due to COVID restrictions. City staff remained active in FWWA and NEWSC. Summary of completed activities and NEWSC reports attached.

**Missing Information**

Do not close your work until you **SAVE**.

**Note:** For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (09/20)

**Minimum Control Measures - Section 2 : Complete**

**2. Public Involvement and Participation**

**a. Permit Activities.** Complete the following information on Public Involvement and Participation Activities related to storm water. Select the Delivery Mechanism that best describes how the permit activities were conveyed to your population. Use the Add Event to add additional entries.

<b>Event Start Date</b>	2/20/2020
<b>Project/Event Name</b>	Utilities Committee meeting and Council meeting
<b>Delivery Mechanism</b>	Government Event (Public Hearing, Council Meeting, etc)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
		11-50	

<input checked="" type="checkbox"/> MS4 Annual Report <input type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	<input type="radio"/> Yes <input checked="" type="radio"/> No
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<b>Event Start Date</b>	4/23/2020
<b>Project/Event Name</b>	City-wide plan update - adjacent communities meeting with McMahon
<b>Delivery Mechanism</b>	Other

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input checked="" type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<input type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input checked="" type="checkbox"/> Other	1 - 10	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	1/9/2020
<b>Project/Event Name</b>	Erosion Control Ordinance Update
<b>Delivery Mechanism</b>	Government Event (Public Hearing, Council Meeting, etc)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input type="checkbox"/> Storm Water Management Program <input checked="" type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input type="checkbox"/> Residents <input type="checkbox"/> Businesses <input checked="" type="checkbox"/> Contractors <input checked="" type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	2/20/2020
<b>Project/Event Name</b>	Illicit Discharge Ordinance Update
<b>Delivery Mechanism</b>	Government Event (Public Hearing, Council Meeting, etc)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input type="checkbox"/> Storm Water Management Program <input checked="" type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	3/26/2020		
<b>Project/Event Name</b>	Post-Construction Stormwater Management Ordinance		
<b>Delivery Mechanism</b>	Government Event (Public Hearing, Council Meeting, etc)		
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input type="checkbox"/> Storm Water Management Program <input checked="" type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input checked="" type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	9/17/2020		
<b>Project/Event Name</b>	MS4 Permit Overview (repeat 2019 presentation)		
<b>Delivery Mechanism</b>	Government Event (Public Hearing, Council Meeting, etc)		
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input checked="" type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	1/9/2020		
<b>Project/Event Name</b>	Erosion Control Program Update		
<b>Delivery Mechanism</b>	Government Event (Public Hearing, Council Meeting, etc)		
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input checked="" type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input type="checkbox"/> Residents <input type="checkbox"/> Businesses <input checked="" type="checkbox"/> Contractors <input checked="" type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

<b>Event Start Date</b>	10/8/2020		
<b>Project/Event Name</b>	Post-Construction Program Update		
<b>Delivery Mechanism</b>	Government Event (Public Hearing, Council Meeting, etc)		
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input checked="" type="checkbox"/> Storm Water Management Program	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

<input type="checkbox"/> Storm Water related ordinance	<input type="checkbox"/> Residents		
<input type="checkbox"/> Other: <input type="text"/>	<input type="checkbox"/> Businesses		
	<input type="checkbox"/> Contractors		
	<input checked="" type="checkbox"/> Developers		
	<input type="checkbox"/> Industries		
	<input type="checkbox"/> Other		

**b. Volunteer Activities.** Complete the following information on Public Involvement and Participation Activities related to storm water. Select the Delivery Mechanism that best describes how volunteer activities were conveyed to your population. Use the Add Event to add additional entries.

<b>Event Start Date</b>	8/22/2020		
<b>Project/Event Name</b>	FWWA River Cleanup		
<b>Delivery Mechanism</b>	Clean up event		
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
Volunteer Opportunity	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

**c. Brief explanation on Public Involvement and Participation reporting.** *Limit response to 250 characters and/or attach supplemental information on the attachments page.*

Public involvement and participation program included various Utilities Committee and Council meetings throughout the year and the FWWA River Cleanup in August. Table of activities is attached.

### Missing Information

**Do not close** your work until you **SAVE**.

**Note:** For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (09/20)

## Minimum Control Measures - Section 3 : Complete

### 3. Illicit Discharge Detection and Elimination

- a. How many total outfalls does the municipality have?   Unsure
- b. How many outfalls did the municipality evaluate as part of their routine ongoing field screening program?   Unsure
- c. From the municipality's routine screening, how many were confirmed illicit discharges?   Unsure

- d. How many illicit discharge complaints did the municipality receive?   Unsure
- e. From the complaints received, how many were confirmed illicit discharges?   Unsure
- 
- f. How many of the identified illicit discharges did the municipality eliminate in the reporting year (from both routine screening and complaints)?   Unsure

(If the sum of 3.c. and 3.e. does not equal 3.f., please explain below.)

- g. How many of the following enforcement mechanisms did the municipality use to enforce its illicit discharge ordinance? Check all that apply and enter the number of each used in the reporting year.  Unsure

- Verbal Warning
- Written Warning (including email)
- Notice of Violation
- Civil Penalty/ Citation

Additional Information: \_\_\_\_\_

- h. Brief explanation on Illicit Discharge Detection and Elimination reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

Conductivity from salt and hospital HVAC hard to eliminate. Private pond dye reported to DNR. Outfalls unresolved will be screened again in 2021. Program update completed in 2020, elected official review 2021.

## Missing Information

**Do not close** your work until you **SAVE**.

**Note:** For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (09/20)

## Minimum Control Measures - Section 4 : Complete

### 4. Construction Site Pollutant Control

- a. How many total construction sites with one acre or more of land disturbing construction activity were active at any point in the reporting year?   Unsure
- b. How many construction sites with one acre or more of land disturbing construction activity did the municipality issue permits for in the reporting year?   Unsure
- c. How many erosion control inspections did the municipality complete in the reporting year?   Unsure
- 
- d. What types of enforcement actions does the municipality have available to compel compliance with the regulatory mechanism? Check all that apply and enter the number of each used in the reporting year.  Unsure

<input type="checkbox"/> No Authority	
<input checked="" type="checkbox"/> Verbal Warning	187
<input checked="" type="checkbox"/> Written Warning (including email)	28
<input checked="" type="checkbox"/> Notice of Violation	8
<input checked="" type="checkbox"/> Civil Penalty/ Citation	1
<input checked="" type="checkbox"/> Stop Work Order	0
<input type="checkbox"/> Forfeiture of Deposit	
<input type="checkbox"/> Other - Describe below	

e. Brief explanation on Construction Site Pollutant Control reporting . *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

New Erosion Control Inspector started April 6, 2020. Approximately 8 week gap of limited inspections. Ordinance and program update done in 2020.

### Missing Information

Do not close your work until you **SAVE**.

**Note:** For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (09/20)

## Minimum Control Measures - Section 5 : Complete

### 5. Post-Construction Storm Water Management

a. How many sites with new structural storm water management facilities\* have received local approval ?   Unsure

\*Engineered and constructed systems that are designed to provide storm water quality control such as wet detention ponds, constructed wetlands, infiltration basins, grassed swales, permeable pavement, catch basin sumps, etc.

b. Does the municipality utilize privately owned storm water management facilities in its pollutant reduction analysis?  Yes  No  Unsure

c. If Yes, How many privately owned storm water management facilities were inspected in the reporting year ?   Unsure

Inspections completed by private land owners should be included in the reported number.

d. What types of enforcement actions does the municipality have available to compel compliance with the regulatory mechanism? Check all that apply and enter the number of each used in the reporting year.  Unsure

<input type="checkbox"/> No Authority	
<input checked="" type="checkbox"/> Verbal Warning	2
<input checked="" type="checkbox"/> Written Warning (including email)	4
<input checked="" type="checkbox"/> Notice of Violation	20



- Civil Penalty/ Citation
- Forfeiture of Deposit
- Complete Maintenance
- Bill Responsible Party
- Other - Describe below

e. Brief explanation on Post-Construction Storm Water Management reporting . *If marked 'Unsure' on any questions above, justify your reasoning. Limit your response to 250 characters and/or attach supplemental information on the attachments page.*

Private site inspections limited due to staff time and COVID. Ordinance and program update completed. Other priorities were training new ESC Inspector and city-wide plan update.

### Missing Information

Do not close your work until you **SAVE**.

**Note:** For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (09/20)

### Minimum Control Measures - Section 6 : Complete

#### 6. Pollution Prevention

Storm Water Management Facility Inspections  Not Applicable

- a. Enter the total number of municipally owned or operated structural storm water management facilities ?   Unsure
- b. How many new municipally owned storm water management facilities were installed in the reporting year ?   Unsure
- c. How many municipally owned storm water management facilities were inspected in the reporting year?   Unsure
- d. What elements are looked at during inspections (250 character limit)?

Sediment depth in HSDs and ponds, trash, bank stability, inlet and outlet structures, and vegetation.

- e. How many of these facilities required maintenance?   Unsure
- f. Brief explanation on Storm Water Management Facility inspection reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

Inspection and maintenance generally on schedule.

Public Works Yards & Other Municipally Owned Properties (SWPPP Plan Review)  Not Applicable

- g. How many municipal properties require a SWPPP?   Unsure

8

h. How many inspections of municipal properties have been conducted in the reporting year?

43

Unsure

i. Have amendments to the SWPPPs been made?

Yes  No  Unsure

j. If yes, describe what changes have been made. Limit response to 250 characters and/or attach supplemental information on the attachment page:

k. Brief explanation on Storm Water Pollution Prevention Plan reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

DPW provides inspection for Facilities Sites, including their main operations building and Reid Golf Course maintenance area. Fire and Utilities Departments perform their own inspections.

Collection Services - *Street Sweeping / Cleaning Program*  Not Applicable

l. Did the municipality conduct street sweeping/cleaning during the reporting year?

Yes  No  Unsure

m. If known, how many tons of material was removed?

1282

Unsure

n. Does the municipality have a low hazard exemption for this material?

Yes  No

o. If street cleaning is identified as a storm water best management practice in the pollutant loading analysis, was street cleaning completed at the assumed frequency?

Yes - Explain frequency per 2014 city-wide stormwater management plan

No - Explain \_\_\_\_\_

Not Applicable

Collection Services - *Catch Basin Sump Cleaning Program*  Not Applicable

p. Did the municipality conduct catch basin sump cleaning during the reporting year?

Yes  No  Unsure

q. How many catch basin sumps were cleaned in the reporting year?

31

Unsure

r. If known, how many tons of material was collected?

160

Unsure

s. Does the municipality have a low hazard exemption for this material?

Yes  No

t. If catch basin sump cleaning is identified as a storm water best management practice in the pollutant loading analysis, was cleaning completed at the assumed frequency?

Yes- Explain frequency \_\_\_\_\_

No - Explain 100% inspected, cleaned if needed

Not Applicable

Collection Services - Leaf Collection Program  Not Applicable

- u. Does the municipality conduct curbside leaf collection?  Yes  No  Unsure
- v. Does the municipality notify homeowners about pickup?  Yes  No  Unsure
- w. Where are the residents directed to store the leaves for collection?
  - Pile on terrace  Pile in street  Bags on terrace  Unsure
  - Other - Describe pile on terrace on 4 lane and collector streets
- x. What is the frequency of collection?
  - weekly 3-4 cycles per weather conditions
- y. Is collection followed by street sweeping/cleaning?  Yes  No  Unsure
- z. Brief explanation on Collection Services reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page*

Fourth round and additional sweeping in 2020 due to good weather conditions.

Winter Road Management  Not Applicable

\*Note: We are requesting information that goes beyond the reporting year, answer the best you can.

- aa. How many lane-miles of roadway is the municipality responsible for doing snow and ice control?   Unsure
- ab. Provide amount of de-icing products used by month last winter season?  
Solids (tons) (ex. sand, or salt-sand)

Product	Oct	Nov	Dec	Jan	Feb	Mar
<u>Salt</u>	45	557	983	1082	472	31
<u>Sand</u>	0	0	0	0	0	0
<u>Salt/sand mix</u>	0	0	0	0	0	0
<u>Other</u>	0	0	0	0	0	0

Liquids (gallons) (ex. brine)

	Oct	Nov	Dec	Jan	Feb	Mar
<u>Brine</u>	3233	7913	9238	15850	14089	1800
<u>Chem-melt</u>	0	0	0	0	0	0
<u>Pre-wetting compound</u>	0	0	0	0	0	0
<u>Other</u>	9	0	40	0	0	0

- ac. Was salt applying machinery calibrated in the reporting year?  Yes  No  Unsure
- ad. Have municipal personnel attended salt reduction strategy training in the reporting year?  Yes  No  Unsure

Training Date	Training Name	# Attendance
8/4/2005	2020 Salt Symposium August 4-5	1

- ae. Brief explanation on Winter Road Management reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach*

supplemental information on the attachments page

Continued to follow City snow and ice policies, procedures and salt application matrix with no changes to our program.

## Internal (Staff) Education & Communication

- af. Has training or education been held for municipal or other personnel involved in implementing each of the pollution prevention program elements?  Yes  No  Unsure

If yes, describe what training was provided (250 character limit):

See attached documents from Parks and DPW Operations

When: throughout year

How many attended: 128

- ag. Describe how the municipality has kept the following local officials and municipal staff aware of the municipal storm water discharge permit programs and its requirements.

Elected Officials

Presentations to Utilities Committee throughout the year.

Municipal Officials

Same as elected officials.

Appropriate Staff ( such as operators, Department heads, and those that interact with public)

Monthly staff and workgroup meetings.

- ah. Brief explanation on Internal Education reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

Group training limited due to COVID. Operations staff generally do not have computers. Individual training and handouts.

## Missing Information

Do not close your work until you **SAVE**.

**Note:** For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (09/20)

## Minimum Control Measures - Section 7 : Complete

### 7. Storm Sewer System Map

- a. Did the municipality update their storm sewer map this year?

Yes  No  Unsure

If yes, check the areas the map items that got updated or changed:

Storm water treatment facilities

Storm pipes

- Vegetated swales
- Outfalls
- Other - Describe below

- b. Brief explanation on Storm Sewer System Map reporting. *If you marked Unsure for an question for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

Maps updated for 2020 construction, city limits, delineated wetlands, outfalls, new public and private stormwater practices.

## Missing Information

Do not close your work until you SAVE.

Form 3400-224 (09/20)

## Final Evaluation - Complete

### Fiscal Analysis

Complete the fiscal analysis table provided below. For municipalities that do not break out funding into permit program elements, please enter the monetary amount to your best estimate of what funding may be going towards these programs.

Annual Expenditure Reporting Year	Budget Reporting Year	Budget Upcoming Year	Source of Funds
-----------------------------------	-----------------------	----------------------	-----------------

**Element:** Public Education and Outreach

7,684	8,000	8,000	<u>Storm water utility</u>
-------	-------	-------	----------------------------

**Element:** Public Involvement and Participation

3,258	5,000	5,000	<u>Storm water utility</u>
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**Element:** Illicit Discharge Detection and Elimination

31,130	15,000	21,500	<u>Storm water utility</u>
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**Element:** Construction Site Pollutant Control

115,094	107,719	122,085	<u>Storm water utility</u>
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**Element:** Post-Construction Storm Water Management

113,699	85,000	85,000	<u>Storm water utility</u>
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**Element:** Pollution Prevention

1,378,990	1,503,567	1,505,397	<u>Storm water utility</u>
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**Other (describe)**

Mapping, annual report preparation and DNR Fee

10,322	12,600	12,600	<u>Storm water utility</u>
--------	--------	--------	----------------------------

Please provide a justification for a "0" entered in the Fiscal Analysis. *Limit response to 250 characters.*

### Water Quality

a: Were there any known water quality improvements in the receiving waters to which the

municipality's storm sewer system directly discharges to?

Yes  No  Unsure If Yes, explain below:

Three additional wet stormwater ponds and 8 HSD's constructed

**b:** Were there any known water quality degradation in the receiving waters to which the municipality's storm sewer system directly discharges to?

Yes  No  Unsure If Yes, explain below:

High conductivity in Garners Creek due to private snow management

**c:** Have any of the receiving waters that the municipality discharges to been added to the impaired waters list during the reporting year?

Yes  No  Unsure

**d:** Has the municipality evaluated their storm water practices to reduce the pollutants of concern?

Yes  No  Unsure

### Storm Water Quality Management

**a.** Has the municipality completed or updated modeling in the reporting year (relating to developed urban area performance standards of s. NR 151.13(2)(b)1., Wis. Adm. Code)?  Yes  No

**b.** If yes, enter percent reduction in the annual average mass discharging from the entire MS4 to surface waters of the state as compared to implementing no storm water management controls:

Total suspended solids (TSS)

Total phosphorus (TP)

### Status of Total Maximum Daily Loads (TMDLs) Implementation

The permittee Appleton City is subject to the following approved TMDLs: Lower Fox River Basin and Lower Green Bay; Upper Fox and Wolf River Basin

The permittee intends to comply with the following permit requirements to show progress towards meeting the TMDL:

**[A.3.1] The Permittee is following the TMDL Compliance Plan, which received Department concurrence prior to April 30, 2019.**

The permittee is confirming that all planned efforts are on schedule.

Agree  Disagree

**[A.6.3] Final Documentation.**

The permittee is confirming that all planned efforts are on schedule to submit the final documentation materials [updates to mapping, modeling, tabular summary, and Implementation Plan] under section A.6.3 by October 31, 2023.

Agree  Disagree

**[C.3-4].a Which Compliance option does the permittee anticipate choosing?**

- TMDL Implementation Plan     Adaptive Management Project

**[C.3-4].b The Permittee is confirming that all planned efforts are on schedule to meet requirements due to the department.**

- For an Adaptive Management project, a plan is required within 36 months of the TMDL approval date.
- For TMDL Implementation, updates to mapping, modeling, tabular summary, and Implementation Plan documents are required within 48 months of the TMDL approval date.)

- Agree     Disagree

**Additional Information**

Based on the municipality's storm water program evaluation, describe any proposed changes to the municipality's storm water program. *If your response exceeds the 250 character limit, attach supplemental information on the attachments page.*

Update to City-wide plan on schedule with DNR planning grant.



Do not close your work until you SAVE.

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Form 3400-224 (09/20)

**Requests for Assistance on Understanding Permit Programs**

Would the municipality like the Department to contact them about providing more information on understanding any of the Municipal Separate Storm Sewer Permit programs?

Please select all that apply:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Pollutant Control
- Post-Construction Storm Water Management
- Pollution Prevention
- Storm Water Quality Management
- Storm Sewer System Map
- Water Quality Concerns
- Compliance Schedule Items Due
- MS4 Program Evaluation

Do not close your work until you **SAVE**.

## Required Attachments and Supplemental Information

Any other MS4 program information for inclusion in the Annual Report may be attached on here. Use the Add Additional Attachments to add multiple documents.

Upload Required Attachments (15 MB per file limit) - [Help reduce file size and trouble shoot file uploads](#)

\*Required Item

**Note:** To replace an existing file, use the 'Click here to attach file ' link or press the to delete an item.

### Storm Sewer System Map

 File Attachment

[Mapscombined.pdf](#)

### Attach - Other Supporting Documents

#### AR IP

 File Attachment

[2020PublicParticipationcompletedactivities.pdf](#)

#### AR EO

 File Attachment

[2020IEPlancompletedactivities.pdf](#)

#### AR Other

 File Attachment

[2020NEWSCOUTREACHREPORT.pdf](#)

#### AR BMPInspSum

 File Attachment

[StormwaterInspectMaintenanceList2020EOY.xls](#)

#### AR SWGroupReport

 File Attachment

[2020NEWSCAnnualReport.pdf](#)

#### AR SWMap

 File Attachment

[stormpipecombinedmaps.pdf](#)

#### AR IDDE

 File Attachment

[Illicitdischargecomplaints2020.xls](#)

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## AR Other

 File Attachment

[2020-2021PublicWorksGuide.pdf](#)

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## AR Other

 File Attachment

[FieldScreeningBodyAB.pdf](#)

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## AR Other

 File Attachment

[2020FieldScreeningAppD.pdf](#)

(To remove items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

## Attach - Permit Compliance Documents

(To remove items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

## Missing Information

**Draft and Share PDF Report with the permittee's governing body or delegated representatives.**

Press the button below to create a PDF. The PDF will be sent to the email address associated with the WAMS ID that is signed in. After the annual report has been reviewed by the governing body or delegated representative, return to the MS4 eReporting System to submit the final report to the DNR.

[Draft and Share PDF Report](#)

## Sign and Submit Your Application

### Steps to Complete the signature process

1. Read and Accept the Terms and Conditions
2. Press the Submit and Send to the DNR button

**NOTE:** For security purposes all email correspondence will be sent to the address you used when registering your WAMS ID. This may be a different email than that provided in the application. For information on your WAMS account click [HERE](#).

### Terms and Conditions

**Certification:** I hereby certify that I am an authorized representative of the municipality covered under Appleton City MS4 Permit for which this annual report or other compliance document is being submitted, and that the information contained in this submittal 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.

Signee (must check current role prior to accepting terms and conditions)

- Authorized municipal contact using WAMS ID.
- Delegation of Signature Authority ( Form 3400-220 ) for agent signing on the behalf of the authorized municipal contact.
- Agent seeking to share this item with authorized municipal contact (authorized municipal contact must get WAMS id and complete signature).

**Name:**

**Title:**

Authorized Signature.

- I accept the above terms and conditions.

After providing the final authorized signature, the system will send an email to the authorized party and any agents. This email will include a copy to the final read only version of this application.

2020 CITY OF APPLETON PUBLIC EDUCATION AND OUTREACH PLAN

January 2021

	TOPIC	TARGET AUDIENCE	PLANNED ACTIVITY	MECHANISM		PRIMARY LEAD		COMPLETED ACTIVITY
				ACTIVE	PASSIVE	CITY	NEWSC	
1	1. Promote detection and elimination of illicit discharges and water quality impacts associated with such discharges from municipal separate storm sewer system.	1. Residents	2. DPW Newsletter		X	X		DPW Newsletter mailed June 2020 16 active pledge supporters in 2020
2			6. Stormwater Credit Policy Pledge Supporter		X	X		
3			10. One-on-one communication	X		X		
4			11. NEWSC Exhibiting	X			X	
5		2. City staff - DPW Technicians	14. Citizens Academy Presentation	X		X		Discuss throughout the year in response to reported discharges See NEWSC Report This activity canceled due to COVID This activity canceled due to COVID
6			13. Group Training	X		X		
7			10. One-on-One communication	X		X		
8		3. Businesses						Discuss throughout the year in response to reported discharges
9								
10								1
1	2. Inform and educate the public about the proper management of materials that may cause stormwater pollution from sources including automobiles, pet waste, household hazardous waste and household practices.	1. Residents	2. DPW Newsletter		X	X		DPW Newsletter mailed June 2020 NEWSC Posters placed in park bathrooms and on park fences 16 active pledge supporters in 2020 See NEWSC Report
2			3. NEWSC Posters		X	X		
3			6. Stormwater Credit Policy Pledge Supporter		X	X		
4			11. NEWSC Exhibiting	X			X	
5		2. Students	14. NEWSC school presentations	X			X	See NEWSC Report Contract signed with FWWA but canceled due to COVID
6			15. Summer Camp	X		X		
7								
8								1
9								
10								
1	3. Promote beneficial onsite reuse of leaves and grass clippings and proper use of lawn and garden fertilizers and pesticides.	1. Residents	2. City DPW newsletter		X	X		DPW Newsletter mailed June 2020 NEWSC posters placed in park bathrooms and on park fences 16 active pledge supporters in 2020 See NEWSC Report
2			3. NEWSC posters		X	X		
3			6. Stormwater Credit Policy Pledge Supporter		X	X		
4			11. NEWSC Exhibiting	X			X	
5		2. Students	15. Summer Camp	X		X		Contract signed with FWWA but canceled due to COVID
6								
7								
8								1
9								
10								
1	4. Promote the management of streambanks and shorelines by riparian landowners to minimize erosion and restore and enhance the ecological value of waterways.	1. Residents	16. River cleanup	X			X	River Cleanup held in August 2020. City supported at \$2500 level
2								
3		2. Students	14. NEWSC school presentation	X			X	See NEWSC Report Contract signed with FWWA but canceled due to COVID
4			15. Summer Camp	X		X		
5								
6								1
7								
8								
9								
10								
1	5. Promote infiltration of residential stormwater runoff from rooftop downspouts, driveways, and sidewalks.	1. Residents	6. Stormwater Credit Policy Pledge Supporter		X	X		16 active pledge supporters in 2020
2								
3			14. Citizens Academy Presentation	X		X		This activity canceled due to COVID
4								
5						X	X	2 rain barrel stormwater utility credits issued in 2020
6								
7								1
8								
9								
10								

2020 CITY OF APPLETON PUBLIC EDUCATION AND OUTREACH PLAN

January 2021

	TOPIC	TARGET AUDIENCE	PLANNED ACTIVITY	MECHANISM		PRIMARY LEAD		COMPLETED ACTIVITY	
				ACTIVE	PASSIVE	CITY	NEWSC		
1	6. Inform and educate those responsible for the design, installation, and maintenance of construction site practices and stormwater management facilities on how to design, install, and maintain the practices.	1. Design consultants 2. Contractors 3. City staff	10. One-on-one communication	X		X		ESC Inspector in the field throughout the year SW & ESC discussed for private and DPW projects throughout year ESC discussed at DPW pre-construction meetings Sponsored and on planning committee Several City staff attended conference ESC and SWM plan review verbal and written discussion	
2			12. Pre-submittal and Pre-construction meetings	X		X			
3			18. FWWA Watershed Conference	X		X			
4			19. Plan review	X		X			
5									1
1	7. Identify businesses and activities that may pose a stormwater contamination concern, and educate those specific audiences on methods of stormwater pollution prevention.	1. Carpet Cleaners	1. Mailing		X	X		Not done due to limited staff during COVID	
2									
3									
4									
5									0
1	8. Promote environmentally sensitive land development designs by developers and designers, including green infrastructure and low impact development.	1. Owners/Developers 2. Designers	10. One-on-one communication	X		X		Discuss individual projects throughout the year Discuss individual projects during the year Sponsored and on planning committee	
2			10. One-on-one communication	X		X			
3			18. Sponsor FWWA Watershed Conference	X		X			
4									
5									1
							7 Completed topics		
	Passive Mechanisms		Active Mechanisms						
	1. Mailing	0	10. One-on-One communication	1		Number of topics required	6		
	2. Newsletter	1	11. NEWSC Exhibiting	1					
	3. NEWSC Posters	1	12. Meetings	1					
	4. Website	1	13. Group Training	0					
	5. Signage	0	14. Presentations	1					
	6. Stormwater Credit Policy Pledge Supporter	1	15. Summer Camp	0					
	Total Passive Mechansims used	4	16. River Cleanup	1					
			17. Utilities Committee Meeting	1					
			18. Workshops/Conferences	1					
			19. Plan review	1					
	Key:		Total Active Mechanisms Used	8					
	1= used during the year		Required Active Mechanisms	2					
	0= not used during the year								

City of Appleton Education and Outreach Plan 2019-2023 Summary of completed activities

Topics	Year													
	2019		2020		2021		2022		2023					
	Active	Passive	Active	Passive	Active	Passive	Active	Passive	Active	Passive				
1. IDDE	4	2	2	2										
2. HHH, Pets, Vehicles, etc	3	3	2	3										
3. Yard Waste, Pesticide, Fertilizer	3	3	1	3										
4. Stream and Shoreline	3	0	2	0										
5. Residential Infiltration	0	1	0	1										
6. ESC and Post Construction	4	0	4	0										
7. Pollution Prevention	0	1	0	0										
8. Green Infrastructure/Low Impact	3	0	3	0										
Totals	20	10	14	9										

SECTION 2.2 PUBLIC INVOLVEMENT AND PARTICIPATION

ACTIVITY	2020 Planned Activity	2020 Completed		
Annual Report Due to WDNR March 31 each year	Target Participants: General Public Elected Officials  Delivery Mechanism: Committee agenda on website Utilities Committee meeting Common Council meeting  Date: March	February 20, 2020 February 25, 2020 March 4, 2020		
Stormwater Management Program Proposed City-wide Plan Update in 2020-2021	Target Participants: General Public Elected Officials School District Developers Other City Departments  Delivery Mechanism: Committee agenda on website Utilities Committee Presentation Common Council meeting Stakeholder Presentations Stakeholder meetings City staff meetings  Date: throughout the year	Repeated MS4 Permit overview at Utilities Committee on September 24, 2020 Presented Post-Construction Program at Utilities Committee on October 13, 2020  4 days prior to committee meeting See above 8 days after committee meeting Met with City consultant and McMahon (representing adjacent communities) on City-wide plan on April 23, 2020		
Ordinance Updates Erosion and Sediment Control Illicit Discharges Post-Construction Stormwater Management	Target Participants: General Public Elected Officials  Design Consultants Developers Contractors  Delivery Mechanism: Committee agenda on website Utilities Committee Presentation Common Council meeting  Date: As needed	Erosion and Sediment Control Ordinance   January 9, 2020 January 14, 2020 January 22, 2020	Illicit Discharge Ordinance   February 20, 2020 February 25, 2020 March 4, 2020	Post-Construction Ordinance  Sent new ordinance to consultants on April 27, 2020  March 26, 2020 April 1, 2020* April 1, 2020*  *Committee of the whole due to COVID-19
Volunteer Activity	Target Participants: General Public City Staff  Delivery Mechanism: Sponsor FWWA Cleanup Post Sign-up for City staff  Date: Spring	Sponsored at \$2500 level May 2 event canceled due to COVID-19 Held August 22, 2020		



## Department of Public Works – Engineering Division

### MEMO

**TO:** Utilities Committee

**FROM:** Paula Vandehey, Director of Public Works  
Pete Neuberger, Staff Engineer

**DATE:** March 9, 2021

**RE:** Award of 2021D Stormwater Consulting Services Single Source Contract for Lightning Drive Stream Crossings and Stormwater Practices Final Design to raSmith in an amount not to exceed \$107,000.

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The Department of Public Works is requesting approval of the 2021D Stormwater Consulting Services Single Source Contract for Lightning Drive Culverts and Stormwater Practices Final Design to raSmith in an amount not to exceed \$107,000 (budget \$107,250).

#### **PROJECT HISTORY**

The area generally bound by Ballard Road to the west, Broadway drive to the north, French Road to the east, and Edgewood Drive to the south has experienced significant development pressure in recent years. This pressure is expected to continue into the next several years until the area is built out. An essential component necessary for continued development is the extension of Lightning Drive from 600 feet north of Edgewood Drive (CTH JJ) to Broadway Drive, to serve as a transportation and utility corridor.

In the fall of 2018, DPW staff continued the planning of Lightning Drive by soliciting proposals to qualified firms to perform a drainage study with 30% engineering design. At the December 11, 2018 Utilities Committee, DPW Staff recommended that contract award to raSmith. The award memo identified DPW staff's intent to continue working with raSmith through Lightning Drive final design without an RFP process, should staff determine that raSmith met expectations during the drainage study and subsequent contracts.

raSmith completed the study contract in November 2019, while meeting DPW staff's expectations to develop cost-effective stormwater management solutions for Lightning Drive. The raSmith study identified two proposed stream crossings and five proposed stormwater ponds, with corresponding conveyance, for stormwater management.

At the March 24, 2020 Utilities Committee meeting, the Committee approved DPW's recommendation to award the single-source Lightning Drive 60% Preliminary Engineering Design Contract to raSmith. raSmith is nearing completion of this task and will soon be ready to develop the final designs.

## **PROJECT SCHEDULE**

The proposed development schedule of the Lightning Drive corridor is as follows:

- 2021: Complete preliminary (60%) engineering design of two stream crossings, five stormwater ponds, and corresponding stormwater conveyances, and apply for DNR and USACE permits
- 2021: Begin final engineering design of two stream crossings, five stormwater ponds, and corresponding stormwater conveyances; obtain DNR and USACE permits.
- 2022: Land acquisition for roadway and ponds, and complete final design.
- 2023: Construction of Lightning Drive, bridges, and stormwater ponds.

## **CONTRACT SCOPE**

As proposed, the consultant will:

- Perform final modeling of stormwater conveyance, flood control and water quality for the streets and culverts to meet City, State, and Federal requirements, including FEMA floodplain.
- Coordinate design work with City staff and adjacent developers.
- Update and finalize a Stormwater Management Plan documenting proposed practices to meet City, State, and Federal Stormwater Management requirements.
- Provide final bid documents in the form of plans and specifications for construction of two Lightning Drive stream crossings and five stormwater ponds.
- Prepare permit applications to State and Federal Regulators, including a FEMA Letter of Map Revision (LOMR) request.
- Assist City staff answering bidder/contractor questions during bidding and construction.

## **REASON FOR REQUEST**

raSmith was selected for the original drainage study based on a competitive RFP process in 2018 and has performed well on the study and preliminary engineering phases for this project. Their ongoing work on this project makes raSmith well-positioned to provide continued cost-effective services moving forward using a negotiated, single-source contract scope; furthermore, raSmith proposes using the same staff for the proposed contract. Therefore, DPW is requesting permission to contract with raSmith for these final design services using a negotiated contract scope.

## Department of Public Works – Engineering Division

### MEMO

**TO:** Utilities Committee

**FROM:** Paula Vandehey, Director of Public Works  
Pete Neuberger, Staff Engineer

**DATE:** March 9, 2021

**RE:** Award of Single Source Contract with NES Ecological Services for 2021 Wetland Delineation Services in an Amount Not to Exceed \$35,639.70.

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The Department of Public Works is requesting approval to single source contract with NES Ecological Services, a Division of Robert E Lee & Associates, Inc. (NES) for 2021 Wetland Delineations in an amount not to exceed \$35,639.70.

#### **CURRENT AUTHORIZATION**

In February 2019, DPW issued a request for proposals (RFP) for Wetland Delineation Consulting Services. After evaluating the proposals, DPW recommended contract award to NES at the March 12, 2019, Utilities Committee. The committee authorized DPW to contract with NES for 2019 Wetland Delineations, in an amount not to exceed \$30,000. The award memo stated DPW anticipated a multi-year contract extension through 2023, subject to Utilities Committee authorization each year and satisfactory performance by the consultant. In 2020, Utilities Committee and Council approved a single-source quote for 2020 wetlands delineation services for \$22,778.

#### **REASON FOR REQUEST**

The request is made for the following reasons:

- Throughout 2019 and 2020, NES has strongly validated the results of the initial RFP evaluation by cost-effectively providing a very high level of expertise and customer service. Furthermore, because the primary staff person at NES is a WDNR Assured Wetland Delineator, the results of their work do not require a WDNR review and concurrence process. Avoiding this additional step has proved valuable for keeping projects on schedule and avoiding uncertainty.
- The 2019 proposal from NES identified a suggested annual labor and equipment unit price increase of approximately 3% each year throughout the anticipated 5-year period. The 2020 contract included an annual unit price increase of approximately 3.1%. The 2021 NES proposal includes a unit price increase of approximately 3.2% compared to 2020. DPW staff consider the request reasonable for providing continued cost-effective services.

## 2021 Wetland Delineation Services

March 9, 2021

-Page 2-

### **CONTRACT SCOPE**

As DPW and other departments implement their 5-year CIP, they must occasionally investigate potential wetlands to remain compliant with State and Federal wetland regulations. For 2021, several project sites have been identified. Cost estimate and responsible department are identified in the project list below:

- Edgewood Drive (CTH JJ) Water Main Extension (Public Works - \$3,439.90)
- Miscellaneous Stormwater Management Allowance (Public Works - \$7,560.10)
- Plamann Park Supplemental Delineation Work (Public Works - \$4,000.00)
- Raw Water Line Supplemental Delineation/Permit Work (Public Works - \$4,000.00)
- Potential Land Acquisition (Community and Economic Development - \$7,604.95)
- Lungaard Park (Facilities & Construction Mgt - \$3,676.65)
- Pierce Park Trails (Facilities & Construction Mgt - \$2,306.65)
- Memorial Park Parking/Pavilion (Facilities & Construction Mgt - \$3,051.45)

DPW staff also anticipate contracting with NES for 2022-2023 wetlands delineations, subject to Utilities Committee and Common Council approval at the appropriate times.

## Department of Public Works – Engineering Division

### MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works  
Pete Neuberger, Staff Engineer

SUBJECT: Award Single Source Unit K-21 Native Landscape Management Contract to Applied Ecological Services, Inc., in an amount not to exceed \$256,680.

DATE: March 9, 2021

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The Department of Public Works recommends award of the single source K-21 Native Landscape Management Contract to Applied Ecological Services, Inc. (AES), in an amount not to exceed \$256,680 (budget \$256,680).

The following tasks are included in this contract:

#### Native Vegetation Maintenance and New Installations at City Stormwater Ponds and Channels

- Provide vegetation inspections and recommendations.
- Provide invasive species and algae control through herbicide, mowing, brushing, and/or controlled burns.
- Provide preparation, seeding, planting, and erosion control at sparsely established areas and new sites.
- Second phase planting of an “urban reforestation” area along the north side of Leona Pond.
- Maintain pond aerators.

In addition to work at DPW sites, the proposed contract amount includes an estimated \$6,220 of work at Facilities Department sites, to be paid by Facilities Department through interdepartmental agreement.

The Department of Public Works requests that the Utilities Committee approve a contract with AES, who was the 2017, 2018, 2019, 2020 contractor, for these services. This request is consistent with the approved 2021 stormwater budget, the March 15, 2017 Unit K-17 approval by the Common Council, and the March 2017 award memo by the Department of Public Works requesting use of AES as its consultant/contractor for native landscaping through 2021, subject to contractor performance in the prior year and annual contract approval.

AES performed well as the 2020 contractor, demonstrating good customer service, expertise, and cost-effectiveness. Proposed K-21 unit prices include a 3% unit price increase compared to the K-20 unit prices, which is in line with the proposed annual unit price adjustment in the original 2017 AES proposal.

Earlier this year, AES was purchased by Resource Environmental Solutions (RES), a Texas-based environmental restoration company. AES K-21 personnel and equipment are unaffected by this acquisition, and DPW staff anticipate no changes to the service provided. Contractually, AES has informed the DPW Staff they are now “RES Great Lakes, LLC dba Applied Ecological Services”.



*"...meeting community needs...enhancing quality of life."*

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Department of Utilities  
Water Treatment Facility  
2281 Manitowoc Road  
Menasha, WI 54952  
920-997-4200 phone  
920-997-3240 fax

**TO:** Chairperson Vered Meltzer and Members of the Utilities Committee

**FROM:** Utilities Director Chris Shaw

**DATE:** March 3, 2021

**RE:** *Award Contract Amendment #1 to AECOM for the America's Water Infrastructure Act Project in the amount of \$22,788*

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**BACKGROUND:**

In 2020, the Appleton Water Utility (AWU) was required to perform a risk and resiliency assessment of the utility. The assessment was a requirement of the Environmental Protection Agency (EPA) and the Wisconsin Department of Natural Resources (WDNR). These federal and state requirements relied on industry performance standards that were adhered to by the AWU. AECOM was the consulting firm that managed the project elements and completed the computer modeling of natural and malevolent acts. The completed risk and resiliency assessment from the AWU was then received by the EPA in December, 2020.

Beyond the risk and resilience assessment report, an emergency response plan needs to be developed to address deficiencies found in 2020. This requirement will need to be submitted to the EPA and WDNR prior to June 30, 2021. City staff from Public Works, Finance, and Utilities that had partnered with AECOM in 2020 to complete the federal and state requirements would prefer to pursue completing the emergency response plan with AECOM. AECOM has fulfilled their base contract scope and has produced the foundational data to complete the emergency response plan. Due to the sensitive and secure nature of this work I will not be detailing the proposed scope.

**FUNDING:**

Funding for this project is found in the Treatment Administrative Program of the Water Utility Budget. Between 2020 and 2021 a total of \$145,000 has been budgeted for the now completed risk assessment and the proposed 2021 emergency response plan. The 2020 AECOM base contract was \$43,550 and this proposed amendment would authorize an additional \$22,788.

If you have any questions regarding the project please contact Chris Shaw at 832-2362.

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# **MS4 STORMWATER PERMIT 2.6 POLLUTION PREVENTION**

UTILITIES COMMITTEE

MARCH 9, 2021

# 1. POLLUTION PREVENTION PROGRAM COMPONENTS

- WRITTEN PROGRAM OUTLINE
- MAJORITY OF REQUIREMENTS IMPLEMENTED THROUGH MULTIPLE DIVISIONS OF PUBLIC WORKS AND PARKS, RECREATIONS AND FACILITIES MANAGEMENT
- EXTENSIVE RECORD KEEPING
- EXTENSIVE STAFF TRAINING
- FOCUS ON GOOD HOUSEKEEPING PRACTICES



## 2. MUNICIPALLY OWNED AND OPERATIONS STORMWATER MANAGEMENT PRACTICES (SMP)

- INVENTORY – TABLE FORMAT INCLUDING TYPE OF SMP AND AVAILABLE INFORMATION (SUCH AS RECORD DRAWINGS AND MAINTENANCE PLANS)
- SMP NUMBERING CORRESPONDING TO MAPPING REQUIREMENTS OF PERMIT
- OPERATION AND MAINTENANCE PLANS FOR EVERY SMP IN THE INVENTORY
- DOCUMENTATION OF INSPECTIONS AND MAINTENANCE ACTIVITIES

# 3. MUNICIPALLY OWNED PUBLIC WORKS FACILITIES

- 8 SITES
  - MUNICIPAL SERVICES BUILDING
  - GLENDALE/SANDRA STREET STORAGE SITE
  - WHITMANN STREET YARD WASTE SITE
  - FIRE STATION 6 (DUE TO TRAINING FACILITY)
  - REID GOLF COURSE MAINTENANCE BUILDING/AREA
  - PARKS, RECREATION AND FACILITIES WITZKE BLVD OPERATIONS SITE
  - WATER FILTRATION PLANT
  - WASTEWATER TREATMENT PLANT
- REQUIRES SITE SPECIFIC STORMWATER POLLUTION PREVENTION PLANS (SWPPPS)
- INITIAL PLANS IN PLACE SINCE 2004 AND 2007. PERIODIC UPDATES COMPLETED AS NEEDED.

## 4. MUNICIPALLY OWNED PUBLIC WORKS FACILITIES

- REQUIRES SITE SPECIFIC STORMWATER POLLUTION PREVENTION PLANS (SWPPPS)
  - MAPPING OF EXPOSED MATERIALS
  - CONTACT INFORMATION FOR RESPONSIBLE STAFF
  - GOOD HOUSEKEEPING TO REDUCE OR ELIMINATE STORMWATER CONTAMINATION
  - MAINTENANCE PLAN WITH INSPECTION PROCEDURES
  - REPAIR PROCESS
  - SPILL PREVENTION AND RESPONSE STANDARD OPERATING PROCEDURES

## 5. SOURCE WATER PROTECTION

- MEASURES TO REDUCE MUNICIPAL SOURCES OF STORMWATER CONTAMINATION WITHIN SOURCE WATER PROTECTION AREAS (DRINKING WATER SOURCES)
  - FREEDOM MUNICIPAL WELL
  - VILLAGE OF FOX CROSSING MUNICIPAL WELL
  - LAKE WINNEBAGO

## 6. COLLECTION SERVICES

- 4 SECTIONS
  - STREET SWEEPING (ONLY IF USED TO MEET TMDL GOALS)
  - CATCH BASIN CLEANING (ONLY IF USED TO MEET TMDL GOALS)
  - MATERIAL HANDLING AND DISPOSAL (ONLY IF SWEEPING AND CATCH BASINS USED TO MEET TMDL GOALS)
  - LEAF MANAGEMENT
- DESCRIPTION OF PROGRAMS, STANDARD OPERATING PROCEDURES, DOCUMENTATION OF ACTIVITIES AND AMOUNT OF MATERIAL COLLECTED

# 7. WINTER ROAD MANAGEMENT

- CONTACT INFORMATION FOR INDIVIDUALS WITH RESPONSIBILITY
- TYPES OF DEICING PRODUCTS AND AMOUNT USED PER MONTH
- TYPE OF EQUIPMENT USED
- NUMBER OF LANE MILES AND ACRES OF MUNICIPAL PARKING LOTS WHERE DEICING IS APPLIED
- SNOW DISPOSAL LOCATIONS
- DESCRIPTION OF PROGRAM – ANTI-ICING, PRE-WETTING, EQUIPMENT CALIBRATION, PAVEMENT TEMPERATURE MONITORING, SALT REDUCTION STRATEGIES, ALTERNATIVE PRODUCTS

## 8. OTHER PROGRAM REQUIREMENTS

- NUTRIENT MANAGEMENT ON MUNICIPAL PROPERTIES WITH MORE THAN 5 ACRES PERVIOUS ACCORDING TO SITE SPECIFIC NUTRIENT APPLICATION SCHEDULE BASED ON SOIL TESTS
- ENVIRONMENTALLY SENSITIVE DEVELOPMENT CONSIDERED FOR ALL MUNICIPAL PROJECTS
  - GREEN INFRASTRUCTURE
  - LOW IMPACT DEVELOPMENT

## 9. OTHER PROGRAM REQUIREMENTS

- INTERNAL TRAINING AND EDUCATION FOR STAFF AND CONTRACTORS IMPLEMENTING THESE REQUIREMENTS
  - TRAINING EVERY YEAR ON EVERY TOPIC
  - DOCUMENT NAMES, RESPONSIBILITIES, CONTENT, DATE
- INFORM ELECTED OFFICIALS OF THE PERMIT REQUIREMENTS AND EXPECTATIONS



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**10. QUESTIONS?**

City of Appleton  
Pollution Prevention Program  
Section 2.6 WPDES Permit No. WI-S050075-3  
Permit Start Date May 1, 2019  
February 2021

This document describes the City of Appleton Pollution Prevention Program as required in the WPDES Stormwater Permit from the Wisconsin Department of Natural Resources (WDNR). The program includes general procedures intended to prevent pollution from City of Appleton operations conducted by several departments. More detailed and supporting documentation for activities by individual departments and divisions will be kept with those departments and divisions.

The following City of Appleton departments and divisions are involved in this program:

- Department of Public Works - Engineering Division
- Department of Public Works – Operations Division
- Parks, Recreation and Facilities Management Department
- Fire Department
- Utilities Department

This document will be kept in the Engineering Division of the Department of Public Works located on the fifth floor of City Center, 100 N. Appleton Street, Appleton, Wisconsin 54911. All questions regarding this document should be directed to the Director of Public Works, at the above address, or (920)-832-6474.

Each department that is responsible for implementing any part of this plan is also responsible for training department staff on their plan and the permit requirements. Individual department and division updates will be periodically collected by the Department of Public Works Engineering Division for an overall update to this document.

Costs associated with this program are generally funded through the budget of each responsible department. Some costs associated with this program are funded through the City of Appleton Stormwater Utility.

Bold text is from the permit.

**2.6 Pollution Prevention – The permittee shall continue to implement its pollution prevention program to prevent or reduce pollutant runoff from the MS4 to waters of the state. The permittee shall implement the following measurable goals:**

**2.6.1 Stormwater management facilities. Update and maintain an inventory of municipally owned or operated stormwater BMP’s such as wet detention ponds, bioretention devices, infiltration basins and trenches, permeable pavement, proprietary sedimentation devices, vegetated swales, or any similar practice used to meet a water quality requirement under this permit. At a minimum, the inventory shall be maintained in a tabular format and contain the following information for each structural stormwater facility:**

- a. A key corresponding to the location of the BMP on the storm sewer system map required under section 2.8.
- b. The name and description of the BMP, including the type and year constructed
- c. A confirmation of whether each of the following elements exist or are not available:
  - (1) An operation and maintenance plan with inspection procedures and schedule
  - (2) A record drawing
  - (3) If using a BMP to meet a water quality requirement in this permit and the BMP is owned by another entity, written documentation exists that the permittee has permission from the owner to use the BMP for this purpose.

The Department of Public Works Engineering Division is responsible for maintaining this information. The current table is included as an attachment to this document. Changes to the inventory will be added to the table annually.

**2.6.2 For each BMP inventoried under section 2.6.1, the permittee shall develop and implement a maintenance plan with inspection procedures and schedule to maintain the pollutant removal operating efficiency of the practice in compliance with any water quality requirement under this permit. Documentation of inspections and maintenance activities shall be maintained.**

This section is the responsibility of the Department of Public Works, Engineering and Operations Divisions, and the Parks, Recreation, and Facilities Management Department. Currently the Department of Public Works provides this service for the Parks, Recreation and Facilities Management Department. This arrangement is subject to change based on a yearly review of available staffing and priorities. Operations and Maintenance Plans are available for the stormwater practices in the table identified in section 2.6.1. As examples, the Operation and Maintenance Plans for Leona Pond and the Northland Biofilter are included as attachments to this document.

**2.6.3 Municipally owned public works facilities. The stormwater pollution prevention plans (SWPPPs) for municipal garages, municipal storage areas, and other public works related municipal facilities located within the permitted area shall be maintained and updated annually as needed and shall include the information in section 2.6.3.a. When a SWPPP is updated, it shall be submitted to the WDNR with the annual report.**

- a. SWPPPs shall include the following information:
  - (1) The physical locations of each facility with a key corresponding to the locations on the storm sewer system map required under section 2.8.
  - (2) The contact information for the individuals with overall responsibility for each facility.
  - (3) A map of each facility, drawn to scale, and including the following features:
    - i. The locations and descriptions of major activities and storage areas.

- ii. **Identification of drainage patterns, potential sources of stormwater contamination and discharge points.**
  - iii. **Identification of nearby receiving waters or wetlands.**
  - iv. **Identification of connections to the MS4.**
  - (4) **A description of procedures, good housekeeping activities, and any BMP's installed to reduce or eliminate stormwater contamination.**
  - (5) **A maintenance plan with inspection procedures and schedule for each facility to identify deficiencies, necessary improvements and/or repairs, assess effectiveness, and address new or unaddressed potential sources of stormwater contamination.**
  - (6) **Spills prevention and response operating procedures**
- b. **The permittee is not required to comply with section 2.6.3 if the permittee certifies that the municipal facility qualifies for no exposure with the WNDR's concurrence.**

The City has SWPPPs for the following sites:

- Whitman Yard Waste Site (Department of Public Works)
- Municipal Services Building and Hardstand Storage Area (Department of Public Works)
- Water Treatment Plant (Utilities Department)
- Wastewater Treatment Plant (Utilities Department)
- Fire Station No. 6 (includes training site) (Fire Department)
- Facilities and Grounds Operations Center on Witzke Blvd (formerly Parks and Recreation Department Office and Storage yard)
- Reid Golf Course Maintenance Yard (Parks, Recreation, and Facilities Management Department)

These plans are separate documents and not included in this program document. Each department is responsible for implementing the stormwater plan for their facilities, including physical site changes, plan updates and amendments, facility inspections, and staff training. In 2016, the Department of Public Works began performing site inspections for Parks, Recreation, and Facilities Management sites and assisting them with any necessary plan updates. This is subject to change based on yearly review of available staff and priorities.

#### **2.6.4 Measures to reduce municipal sources of stormwater contamination within source water protection areas.**

Small portions of the city are tributary to a Freedom municipal well, a Village of Fox Crossing municipal well, and Lake Winnebago. The city will continue current practices within known source water protection areas, including street cleaning and pond maintenance.

#### **2.6.5 Collection services/Storm sewer system maintenance activities.**

This section is the responsibility of the Department of Public Works, Operations Division.

- a. Street sweeping. If routine street sweeping is utilized to meet a water quality requirement under this permit, the permittee shall maintain documentation of the number and type of equipment used, standard operating procedures, an estimate of the number of lane-miles swept annually, and an estimate of the weight in tons of materials collected annually.**

The Department of Public Works Operations Division currently owns two (2) mechanical sweepers, one (1) high efficiency (HE) street sweeper and one Vac-All sweeper. The downtown is swept twice a week with half mechanical sweeping and half high efficiency (HE) sweeping. Arterial streets and industrial areas are swept once every two weeks with the Vac-All or the HE sweeper. The remaining areas are generally swept on either a 3-week or 6-week cycle. Areas that are tributary to regional stormwater ponds are swept on the 6-week cycle. The first sweeping in the spring is initiated when curb lines become exposed from snow and ice and is completed prior to hydrant flushing activities. Sweeping during the fall is associated with the leaf collection process and can be tracked separately according to date. Sweeping is generally done during nighttime hours when a parking control ordinance is in place.

There are approximately 700 lane miles maintained within the annual street sweeping program.

The 2020 Annual Report included collection of 1282 tons of material. The amount of material is tracked through tipping fees.

- b. Catch Basins. If routine cleaning of catch basins with sumps is utilized to meet a water quality requirement under this permit, the permittee shall maintain documentation of the number of catch basins inspected, the number of catch basins cleaned, standard operating procedures, and an estimate of the weight in tons of material collected annually.**

All structures with sumps (HSDs) are tracked in the City's ArcGIS system. The GIS system is updated annually to add any structures constructed that year. They are labeled as such and an updated spreadsheet is created after each annual update.

The Operations Division of Public Works inspects each structure in the spring and cleans them as necessary. Cleaning occurs when there is less than 18" from the top of sediment to the invert of the outlet pipe. The inspection date and cleaning date are documented in the spreadsheet.

The 2020 Annual Report included collection of 160 tons of material. The amount of material collected is tracked through tipping fees.

**c. Material handling and disposal. Material collected under a. and b. of this sections shall be handled and stored in a manner that prevents contamination of stormwater runoff and shall be disposed of or beneficially reused in accordance with applicable solid and hazardous waste statutes and administrative codes. Non-stormwater discharges to water of the state associated with dewatering and drying material collected under sections a. and b. of this section are not authorized by this permit.**

Street sweeping and storm sewer cleaning waste is dumped from the equipment daily in a pit in the yard at the Municipal Services Building. The pit drains to the sanitary sewer. On a weekly basis, the material is removed from the pit and taken to the Outagamie County Landfill for disposal. The amount of removed and disposed material is tracked on a spread sheet using weight tickets from the landfill.

**d. Leaf Management. Proper management of leaves and grass clippings from municipally owned properties and private property. On-site management and/or drop-off shall be communicated to private property owners in accordance with the public education and outreach program implemented under section 2.1 of this permit. If the permittee has a municipal collection program, collected material shall be handled and stored in a manner that prevents contamination from stormwater runoff. For a municipal leaf collection program, the permittee shall maintain the following documentation:**

- (1) A description of the leaf collection program, including the type of pick-up methodology and equipment used, timing of associated street cleaning, standard operating procedures, schedule and frequency, and instructions for private property owners.**

Parks, Recreation and Facilities Management uses mulching mowers in the parks, public terraces, and at other city facilities that they maintain. Generally, no leaves or grass clippings are removed from these sites. When the pools are open, grass clippings inside the fence are bagged to keep them from getting into the pool. Mulching is used when the pools are closed. At Reid Golf Course all material is mulched or composted and kept on-site.

Appleton has two yard waste drop off sites that collect grass clippings, brush, and yard waste from residents. A fee is charged for each bag of grass clippings as an incentive to mulch grass or compost at home.

Leaves are collected by the Department of Public Works Operations Division in the fall in approximately three (3) cycles through the city. Some leaves are ground and made available to residents as mulch. Other leaves are applied to farm fields and provided to landscapers. Grass clippings are currently mixed with other ground yard waste and provided to the public.

Residents are asked to rake their leaves into the road gutter for pickup by the City. Residents are also allowed to place other bulk materials (sticks, garden debris, etc.) out

for pickup at the same time. The City has 4 single-axle dump trucks with modified leaf pushers/rakes that collect leaves into large piles which are then picked up by front end loaders with a clamshell bucket that loads the leaves into trucks for disposal. Street cleaning follows the leaf collection with a mechanical sweeper. The mechanical sweeper is used to pick up larger garden debris and works during colder temperatures.

**(2) An estimate of the weight in tons of material collected annually.**

Appleton collects approximately 5250 tons of leaves each year.

**(3) Municipally operated leaf disposal locations with a key corresponding to the locations on the storm sewer system map required under section 2.8. If the disposal location is outside of the MS4 boundary, then the permittee can provide documentation if the disposal is taken elsewhere.**

After leaves are collected they are temporarily stored at a City-owned parcel in the Town of Center (W4915 CTH O) and a City owned site at Sandra Street and Glendale Street. The City works with area farmers to take leaves for incorporation into their fields. Locations vary year to year. Final disposal locations used in 2020 include:

- Todd Whittman, 8693 State Park Rd. Menasha
- Dan Stumpf, Hwy 114 Harrison
- Scott VandenBerg, Cornerstone Farm, N4065 CR U
- Matt Stumpf, Manitowoc Rd
- B-Ann Farms Kaukauna 55 S/O KK
- Dave VanElzen, Hwy 114 Harrison
- Kendall Vosters, W2594 Cty Rd JJ
- Darin Tiedt, N4151 Cty Rd PP
- Larry Van Handel, S/E corner of Buchanon Rd. and Secluded Ct.
- N5310 Cty Rd PP

**2.6.6 Winter Road Management. If road salt or other deicers are applied by the permittee or a contractor on behalf of the permittee, no more shall be applied than necessary to maintain public safety. Documentation on deicing activities shall be performed by the permittee or a contractor on behalf of the permittee and include the following:**

**a. Contact information for the individuals with overall responsibility for winter roadway maintenance.**

The following people are responsible for winter roadway maintenance:

1. Nate Loper, Deputy Director of Public Works – Operations  
Office 920-832-5804, Cell 920-419-6225, [nathan.loper@appleton.org](mailto:nathan.loper@appleton.org)

2. Lance Wilkinson, Operations Foreman, Department of Public Works  
Office 920-832-5581, Cell 920-419-0265, [lance.wilkinson@appleton.org](mailto:lance.wilkinson@appleton.org)

3. Paula Vandehey, Director of Public Works  
Office 920-832-6474, Cell 920-419-6713, [paula.vandehey@appleton.org](mailto:paula.vandehey@appleton.org)

**b. A description of the types of deicing products used.**

The Department of Public Works Operations Division (streets) uses the following:  
Granular sodium chloride (road salt)  
Liquid sodium chloride 28%, salt brine, prewet and anti-ice application  
Liquid calcium chloride 42% prewet application – mixed 20/80 (calcium/salt brine)

**c. The amount of deicing product used per month.**

This information will be tracked through the City’s inventory system and reported annually.

**d. A description of the type of equipment used.**

The Department of Public Works Operations Division (streets) operates the following equipment:  
10 tri-axle plow trucks, wing and plow, tailgate salt spreader with prewet capabilities  
15 single axle plow trucks, wing and plow, tailgate salt spreader with prewet capabilities  
6 front end loaders with a wing and plow  
2 road graders with a wing and plow  
2 one ton plow trucks with a salt spreader  
3 sidewalk snow plows with a salt spreader

**e. An estimate of the number of lane-miles treated with deicing products for the roadways that the permittee is responsible for, and an estimate in acres of the total area of municipally owned parking lots treated with deicing products by the permittee or contractor.**

The City treats approximately 800 lane miles of roadways and approximately 10 acres of municipally owned parking lots with de-icing materials.

**f. If applicable, snow disposal locations with a key corresponding to the locations on the storm sewer map required under section 2.8.**

South side of the intersection of E. Glendale Avenue and N. Sandra Street  
NE Corner of Kensington Drive and Express Court  
701 S. Whitman Drive



**g. A description of anti-icing, pre-wetting and brining, equipment calibration, pavement temperature monitoring, and/or salt reduction strategies implemented or being considered, and/or alternative products.**

The Department of Public Works Operations Division has a written "Snow and Ice Control Program" adopted by the Common Council to address winter street maintenance. This program does not commit to bare pavement, establishes proper use of chemicals, and sets guidelines for the amount of salt used per lane mile depending on temperature, the type of storm event, and the type of street. It also includes the use of pre-wetting solutions to further reduce salt usage. The equipment used to apply salt is kept in good working condition and calibrated regularly.

The Department of Public Works Operations Division considers available technologies, available equipment, locations of critical sites and available staff in determining snow and ice strategy.

The City applies liquid salt brine as an anti-ice agent prior to snow/ice storms and forecasted frost events on hills, bridges, curves and four lane roads. All equipment having a material spreader is equipped with prewet capabilities and an on-board computer system which regulates material application. This equipment is calibrated annually. The City has a snow and ice matrix that is used to evaluate impending storm conditions and helps determine the proper methodology for combating the snow event. The matrix is attached to this document. The City also subscribes to a weather service that helps establish duration, intensity and timing of a storm. In addition, the service forecasts present and future air and pavement temperatures and recommends material spreading applications.

**h. Other measurable data or information that the permittee uses to evaluate or modify its deicing activities.**

The primary focus of the winter road management program is to anti-ice instead of de-ice as much as possible. City staff stay current with the latest snow and ice technology by networking with vendors and other communities, attending American Public Works Association training on the topic, and sending various staff to UW-Madison and NEWSC sponsored classes regularly. New employees are trained on the program every fall.

**2.6.7 Nutrient management. Application of turf and garden fertilizers on municipally controlled properties, with pervious surfaces over 5 acres each, in accordance with site-specific nutrient application schedule based on appropriate soil tests.**

City owned properties with over 5 acres of pervious area include most city parks, Reid Golf Course, the Water Treatment Plant (WTP) and the Wastewater Treatment Plant (WWTP). The city also owns property with over 5 acres of pervious surface that is leased by USA Youth Sports.

This section is the responsibility of The Parks, Recreation and Facilities Management Department.

The City has a Turf Management Policy for city parks and other City owned properties, except Reid Golf Course. There are also completed soil tests and Nutrient Management Plans for all city parks, Reid Golf Course, and the Water and Wastewater Treatment Plants. The site specific Nutrient Management Plans fall under the Turf Management Policy. Reid Golf Course has a stand-alone Nutrient Management Plan, not under the Turf Management Policy. Reid Golf Course and Parks, Recreation and Facilities Management staff are certified for the proper application of lawn and garden fertilizers and follow the Nutrient Management Plans. The plans will be updated every five (5) years following new soil tests. The lease agreement with USA Youth Sports includes this requirement.

**2.6.8 Environmentally sensitive development. Consideration of environmentally sensitive land development designs for municipal projects, including green infrastructure and low impact development, which shall be designed, installed, and maintained to comply with a water quality requirement under this permit.**

The Parks, Recreation and Facilities Management Department will add this requirement to Requests for Proposals for designs of municipal building projects.

The Department of Public Works evaluates street width for every reconstruction project. Streets are narrowed, increasing terrace width for trees and grass, whenever possible.

**2.6.9 Internal training and education. At a minimum, the permittee shall hold one annual training event for appropriate municipal staff and other personnel involved in implementing each of the elements of the pollution prevention program under this section 2.6. Documentation shall be maintained of the date, the number of people attending this training, the names of each person attending and a summary of their responsibilities, and the content of the training. The permittee shall inform contractors performing any services to implement section 2.6 of the permit requirements and expectations. The permittee shall also inform their elected officials of the permit requirements and expectations.**

Each Department impacted by this section of the Permit is required to provide training to their own personnel regarding the implementation of this plan. Some of the topics may be applicable to multiple departments and combined training efforts will be used whenever the time and topic are appropriate. Training will be incorporated into existing training programs.

**Attachments:**

- Municipal BMP Table (2.6.1)
- Leona Pond Operation and Maintenance Plan (2.6.2)
- Northland Biofilter Operation and Maintenance Plan (2.6.2)
- 2021 Snow and Ice Matrix (2.6.6)

### 2.6.1 Stormwater Practices Inventory (Last Updated 12/31/2020)

DNR BMP ID	BMP Name	BMP Type	Construct Year	O&M Plan?	Record Dwg?
1	Coop Road Pond	Wet Pond	2008	Y	Y
2	Plank Road Northwest Pond	Wet Pond	2005	Y	Y
3	Memorial Park Northeast Pond	Wet Pond	2007	Y	Y
4	Kensington Pond (aka Southeast Pond) and Dam	Wet Pond	2009	Y	Y
6	Ballard Pond (aka Northeast Wetland Det Pond)	Wet Pond	1996	Y	Y
7	Plank Road Pond	Wet Pond	2000	Y	Y
8	Southpoint Commerce Park Pond North (aka K2A Pond)	Wet Pond	2004	Y	Y
9	Plank Road West Pond	Wet Pond	2005	Y	Y
10	French Road Northeast Business Park Pond	Wet Pond	1996	Y	Y
11	Emerald Valley Pond	Wet Pond	2006	Y	Y
12	Glenhurst West Pond	Wet Pond	2003	Y	Y
13	Ashbury Pond	Wet Pond	2000	Y	Y
14	Meade Evergreen Pond	Wet Pond	2001	Y	Y
15	Mud Creek South Pond	Wet Pond	2002	Y	Y
16	Meade Pond (aka Meade-JJ Pond)	Wet Pond	2001	Y	Y
19	Glenhurst East Pond	Wet Pond	2003	Y	Y
20	Apple Hill Farms East Pond	Wet Pond	2005	Y	Y
21	Crossing Meadows Pond	Hybrid Pond	1997	In Progress	Y
22	Apple Hill Farms Pond G-1	Wet Pond	2006	Y	Y
23	Apple Hill Farms Pond 3	Wet Pond	2004	Y	Y
24	Apple Hill Farms Pond 1A	Wet Pond	2004	Y	Y
24	Apple Hill Farms Pond 1B	Wet Pond	2004	Y	Y
25	Apple Hill Farms Pond 4	Wet Pond	2004	Y	Y
26	Apple Hill Farms Pond 6	Wet Pond	2004	Y	Y
27	Southpoint Commerce Park Pond South (aka K2B Pond)	Wet Pond	2004	Y	Y
28	Pershing 441 Pond (aka Pershing Pond)	Wet Pond	2009	Y	Y
29	Apple Hill Farms Pond Dry Pond (aka Pond HP or Low Pond)	Dry Pond	2005	In Progress	Y
30	Apple Hill Farms Pond High Pond (and u.s. grass swale)	Wet Pond	2005	Y	Y
31	Apple Hill Farms Pond 5	Wet Pond	2004	Y	Y
32	Clearwater Creek Pond	Wet Pond	2007	Y	Y
33	Holland Road Pond and Dam	Wet Pond	1998	Y	Y
34	Conkey Pond	Wet Pond	2011	Y	Y
35	Memorial Park South Pond	Wet Pond	2011	Y	Y
36	Northland Ave Biofiltration	Biofilter	2009	Y	Y
37	College Ave Biofilter Southwest	Biofilter	2009	Y	Y
38	College Ave Biofilter Northeast	Biofilter	2009	Y	Y
39	College Ave Biofilter Southeast	Biofilter	2009	Y	Y
40	Apple Hill Farms Mackville Rd (aka F-1) Pond	Wet Pond	2008	Y	Y
41	Apple Hill Farms Thomas Ct (aka E-2) Pond	Wet Pond	2008	Y	Y
42	Reid Golf Course South Pond	Wet Pond	2013	Y	Y
43	Reid Golf Course East Pond	Wet Pond	2013	Y	Y
44	Glacier Ridge Werner NW Pond	Wet Pond	2007	Y	Y
45	Glacier Ridge Werner SW Pond	Wet Pond	2007	Y	Y
46	Glacier Ridge Werner S Pond	Wet Pond	2007	Y	Y
47	Glacier Ridge Southeast (Kurey) Pond	Wet Pond	2007	Y	Y
48	Cotter Street Pond	Wet Pond	2017	Y	Y
49	Lightning JJ Pond	Wet Pond	2017	Y	Y
50	Northland Pond	Wet Pond	2018	Y	Y
51	Leona Pond	Wet Pond	2019	Y	In Progress
52	Schindler 441 Pond	Wet Pond	2019	Y	In Progress
53	Spartan Bear Creek Pond (Pond 2)	Wet Pond	2020	Y	In Progress
54	Spartan Lift Station Pond (Pond 4)	Wet Pond	2020	Y	In Progress
55	Spartan Haymeadow Pond (Pond 5)	Wet Pond	2020	Y	In Progress
56	Apple Ridge Pond A	Wet Pond	2019	Y	In Progress
57	Apple Ridge Pond B	Wet Pond	2020	Y	In Progress
58	Apple Ridge Pond C	Wet Pond	2020	Y	In Progress
59	North Edgewood Estates Pond	Wet Pond	2019	Y	In Progress
60	Broadway Hills Pond South	Wet Pond	2020	Y	In Progress
61	Broadway Hills Pond North	Wet Pond	2020	Y	In Progress

## **Operation and Maintenance Plan**

### **51. Leona Pond**

**Last Updated: 12/31/2020**

#### **Responsible Party**

The City of Appleton Department of Public Works is the party responsible for the operation and maintenance of the pond.

#### **Pond Location and Components**

Pond location and components are indicated on the record drawings on file with the City of Appleton Department of Public Works.

#### **Inspection Requirements**

The City will inspect the entire pond area a minimum once per year for erosion, condition of inlet/outlet pipes and structures, visible sedimentation/scouring of the pond that may impact function, condition of vegetation, damage from burrowing and/or herbivorous animals, and trash. Areas of concern will be documented and repairs will be made in a timely manner by the City of Appleton or its agents. If feasible, non-vegetation components should be inspected before or early in the growing season to reduce the likelihood that vegetation will obscure pond components. If feasible, vegetation components should be inspected in the mid- or late-growing season.

#### **Operation and Maintenance Requirements**

##### Sediment Accumulation

The pond relies on a permanent pool depth of at least 3 feet, measured from the normal water level to the top of any accumulated sediment within the forebays and main bays. This depth should be measured approximately every 10 years, sooner if conditions warrant (e.g. accumulated sediment visible from surface). Additionally, any sediment that obstructs flow into or out of the pond, such as in/around the inlet/outlet pipes and/or structures, should be removed.

If feasible, dredging of large quantities of sediment should be performed in the winter to minimize damage to pond vegetation. Dredging/disposal of sediment from the forebays and main bay shall be performed in accordance with NR 528.

Care should be taken to dredge no deeper than pond bottom design elevations, to prevent excavation through the clay lining the pond bottom.

### Inlet and Outlet Pipes and Structures

inlet and outlet pipes and structures should be kept free of sediment and debris that may impact their function. Pipes and structures should be structurally sound to prevent leaks that could impact design function, such as release rates and water levels.

The inlet and outlet structures, including storm sewer components, will be checked during annual inspections for defects or deterioration. Items in disrepair should be fixed as soon as is feasible. Accumulated sediment, debris and litter should be removed periodically.

### Pond Safety Shelf/Slopes/Embankments

Pond safety shelf and sideslope vegetation is self-sustaining and does not require mowing, other than maintenance mowing intended to reduce weeds. Qualified individuals familiar with native vegetation should perform maintenance as needed to prevent excessive weed growth. Appropriate techniques may include spot herbiciding, mowing, spot mowing, cutting/treatment of woody vegetation, and the like. If plugging or replacement seeding is indicated due to loss of plants, the species mix per the construction documents should be used unless otherwise indicated by the engineer.

The pond does not rely on safety shelf vegetation to perform its primary function of Total Suspended Solids removal, but such vegetation provides aesthetic and habitat benefits while reducing the area available for weed growth, as desired by the City.

If erosion occurs, the area should be reseeded and/or plugged after replacing any lost topsoil. Placement of temporary erosion control practices such as erosion control blankets may be needed during vegetation establishment. Shoreline erosion caused by wave action, fluctuating water levels, and or animals such as muskrats is also possible. Such erosion may reduce or eliminate the vegetation in the affected area. If this occurs, the shoreline should be restored and protected with vegetation and/or temporary or long-term practices such as erosion mats, Turf Reinforcement Mats, and coir logs that are suitable for the wet environment.

Trees and other woody vegetation shall be kept out of any embankment (earth fill) areas to help ensure structural integrity of the embankment is maintained.

### Permanent Pool Area

Permanent pools should be monitored for excessive algae growth. Appropriate treatment, such as cutting, physical removal, and application of chemicals according to manufacturer guidelines are techniques that may be appropriate. Chemical application requires prior WDNR permitting.

If aquatic weeds are detected, DPW should consult with a qualified individual or firm knowledgeable in pond biology to help determine a proper plan for inspection, monitoring, treatment, and/or removal. Natural predators, such as dragonfly larvae and amphibians, tend to keep nuisance insects in check on wet stormwater ponds. If nuisance insect or other wildlife are suspected, an investigation should be conducted. The City of Appleton Health Department has individuals qualified to test for mosquito larvae. If treatment is warranted, WDNR requirements are to be followed.

## Nuisance Wildlife

Muskrats and other burrowing wildlife are often associated with pond problems. The holes they burrow can lead to leakage, unstable shorelines or even embankment failure. In addition, muskrats feed on wetland vegetation that may be established within the pond. Particular attention should be given to the pond embankments to prevent failure. Muskrat populations can be controlled by trapping as required.

## Debris and Litter

The stormwater pond may collect debris and litter. It is recommended that the debris that may affect flow into or out of the pond is removed on a regular basis. The structure at the outlet of the pond may also collect debris. The outlet structure will be inspected annually and after large storms and any debris should be removed to ensure proper performance. Debris trapped inside the outlet structure should also be removed.

## **Maintenance Tasks**

The following tasks are anticipated on an as-needed basis:

### Periodic Maintenance:

- Remove accumulated debris and litter from pond inlet and outlet structures including storm sewers.
- Check for erosion on pond side slopes and around inlet/outlet structures. Repair as necessary.
- Check for animal burrow in shoreline, sideslopes, and pond embankments. Repair as necessary.

### Seasonal Maintenance: Spring (and/or after large events)

- Remove accumulated debris and litter from pond outlet and trash racks.
- Check and repair pond outlet structure for cracks or other undesirable condition.
- Check and repair pond inlet area for settlement and/or erosion above and around the inlet area or other undesirable condition.
- Remove invasive plants as may be recommended by engineer. Control by hand pulling, herbicide application and/or mowing.
- Plant, or seed, additional plants in bare spots or areas with vegetation that is not sufficiently robust to prevent erosion.

### Seasonal Maintenance: Fall

- Remove unwanted woody vegetation from pond side slopes and embankments. Remove by hand pulling, brushing and/or mowing. Undesirable woody vegetation can be mowed.
- Maintain vegetation along pond side slopes as appropriate.

### Infrequent Maintenance

Approximately every ten years, measure sediment levels within the pond and evaluate the need for sediment removal. A minimum pond depth of 3 feet should be maintained to allow for settling of and prevent resuspension of stormwater pollutants.

## **Operation and Maintenance Plan**

### **36 Northland Biofilter**

**Last Updated: 12/31/2020**

### **Responsible Party**

The City of Appleton Department of Public Works is the party responsible for the operation and maintenance of the Biofilter.

### **Biofilter Location and Components**

Biofilter location and components are indicated on the record drawings on file with the City of Appleton Department of Public Works.

### **Inspection Requirements**

The City will inspect the entire Biofilter area a minimum once per year for erosion, condition of inlet/outlet pipes and structures, visible sedimentation/scouring of the Biofilter that may impact function, condition of vegetation, damage from burrowing and/or herbivorous animals, sinkholes, prolonged standing water, and trash. Areas of concern will be documented and repairs will be made in a timely manner by the City of Appleton or its agents. If feasible, non-vegetation components should be inspected before or early in the growing season to reduce the likelihood that vegetation will obscure Biofilter components. If feasible, vegetation components should be inspected in the mid- or late-growing season.

### **Operation and Maintenance Requirements**

#### Inlet and Outlet Pipes and Structures

Inlet and Outlet Pipes should be kept free of sediment and debris that may impact their function. Pipes and structures should be structurally sound, so as to prevent leaks that could impact design function, such as release rates and water levels. The inlet and outlet structures, including storm sewer components, will be checked during annual inspections for defects or deterioration. Items in disrepair should be fixed as soon as is feasible. Accumulated sediment, debris and litter should be removed periodically.

#### Biofilter Slopes/Embankments

Biofilter sideslope/embankment vegetation is turf grass that requires occasional mowing. In case of excessive weed growth, appropriate techniques may include spot herbiciding, mowing, spot mowing, cutting/treatment of woody vegetation, and the like. If plugging or replacement seeding is required due to loss of plants, the species mix per the construction documents should be used unless otherwise indicated by the engineer.

If erosion occurs, the area should be reseeded and/or plugged after replacing any lost topsoil. Placement of temporary erosion control, such as erosion control blankets, may be

needed during vegetation establishment. Shoreline erosion caused by wave action, fluctuating water levels, and or animals such as muskrats is also possible. Such erosion may reduce or eliminate the vegetation in the affected area. To correct, the shoreline should be restored and protected with vegetation and/or temporary or long-term practices such as erosion mats, Turf Reinforcement Mats, and coir logs that are suitable for the wet environment.

Smaller native woody vegetation such as Dogwood species are appropriate, but larger woody vegetation such as trees have large root structures that can weaken slopes and embankments, and should be removed to help ensure structural integrity of the sideslope/embankment.

### Engineered Soil Area

The interior of the Biofilter's visible surface contains a flat bottom that is bound by the Biofilter side slopes. This area consists of a vegetated surface beneath which lies an engineered soil layer at least 2 feet thick designed to allow the slow filtration of runoff, removing pollutants as it passes through to the bottom of the practice. Once there, the treated runoff is collected in an underdrain pipe and routed to the Biofilter outlet pipe. Biofilter function relies on relatively uniform passage of runoff through the bulk of the engineered soil layer, without significant "short cuts" of flow that bypass treatment. Typically, these "short cuts" consist of voids that appear as depressed areas, or "sinkholes" at the biofilter surface. Repeated formation of multiple sink holes, and/or failure of a biofilter to empty standing water within 30 hours of a rainfall event, is evidence that the engineered soil layer is reaching the end of its useful life and must be replaced.

The engineered soil surface area should be monitored for sinkholes and evidence of prolonged (more than 30 hours) standing water after an event. If sinkholes are detected but evidence does indicate the engineered soil must be completely replaced, the sinkhole should be filled with replacement engineered soil meeting DNR standards.

The engineered soil surface area contains native deep-rooted plants to resist erosion and improve aesthetics. The roots of such plants may offer additional sites for pollutant removal and encourage filtration through the engineered soil layer, but are not necessary for the Biofilter to perform its primary function for removal of Total Suspended Solids. If such plants are missing or in poor health, consider replacement plants to help resist erosion and for aesthetic purposes.

The Biofilter engineered soil area surface was initially constructed with a hardwood mulch layer to help resist erosion and aid in the establishment of the native plants. Once the plants have achieved full growth and density, the mulch layer may not be necessary to prevent erosion. If plants are not sufficient to prevent erosion, consider replacing areas of sporadic or missing mulch.

If weeds are detected, they should be removed via herbicide, pulling, or mowing.

Smaller native woody vegetation such as Dogwood species are appropriate, but larger woody vegetation such as trees have large root structures that can create short cuts through the engineered soil layer, and should be removed.

### Nuisance Wildlife

Muskrats and other burrowing may cause Biofilter problems. The holes they burrow can lead to leakage, unstable surfaces or even embankment failure. In addition, muskrats feed on



wetland vegetation that may be established within the Biofilter. Particular attention should be given to the Biofilter embankments to prevent failure. Muskrat populations can be controlled by trapping as required.

### Debris and Litter

The stormwater Biofilter may collect debris and litter. The vegetation within the Biofilter will help to hide the debris and it is recommended that the debris that may affect flow into or out of the Biofilter is removed on a regular basis. The structure at the outlet of the Biofilter may also collect debris. The outlet structure will be inspected annually and after large storms and any debris should be removed to ensure proper performance. Debris trapped inside the outlet structure should also be removed.

### **Maintenance Tasks**

The following tasks are anticipated on an as-needed basis:

#### Periodic Maintenance:

- Remove accumulated debris and litter from Biofilter inlet and outlet structures including storm sewers.
- Check for erosion on Biofilter side slopes and around inlet/outlet structures. Repair as necessary.
- Check for animal burrow in shoreline, sideslopes, and Biofilter embankments. Repair as necessary.

#### Seasonal Maintenance: Spring (and/or after large events)

- Remove accumulated debris and litter from Biofilter outlet and trash racks.
- Check and repair Biofilter outlet structure for cracks or other undesirable condition.
- Check and repair Biofilter inlet area for settlement and/or erosion above and around the inlet area or other undesirable condition.
- Remove invasive plants as may be recommended by engineer. Control by hand pulling, herbicide application and/or mowing.
- Plant, or seed, additional plants in bare spots or areas with vegetation that is not sufficiently robust to prevent erosion.
- Inspect for sinkholes and evidence of prolonged standing water. Spot repair with replacement engineered soil as appropriate.

#### Seasonal Maintenance: Fall

- Remove unwanted woody vegetation from Biofilter side slopes and embankments. Remove by hand pulling, brushing and/or mowing. Undesirable woody vegetation can be mowed.
- Maintain vegetation along Biofilter side slopes as appropriate.

#### Infrequent Maintenance

Inspect biofilter for frequent and/or multiple sinkholes and for evidence of prolonged (more than 30 hours) standing water. If this continues to occur without significant improvement after a designated monitoring period is complete, replace the entire engineered soil layer with material and methods meeting DNR requirements.

**SNOW & ICE CONDITIONS FLOW CHART**

	Ice Storm	Above 20°		10° to 20°		0° to 10°		Below 0°		New Concrete Streets	
		<1.5"	>1.5"	<1.5"	>1.5"	<1.5"	>1.5"	<1.5"	>1.5"	<1.5"	>1.5"
Plow Blade Down *see Note 1*	No	↑ No	Yes	↑ No	Yes	↑ No	Yes	↑ No	Yes	↑ No	Yes
		↓ Yes	Yes	↓ Yes	Yes	↓ Yes	Yes	↓ Yes	Yes	↓ Yes	Yes
Sodium Chloride Rock Salt	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes Chip Mix	Yes Chip Mix	** See note below	** See note below
Sand	Yes	No	No	No	No	No	No	Yes	Yes	Below 0°	Below 0°
Chips	Yes	No	No	No	No	No	No	Yes	Yes	Below 0°	Below 0°
Prewet	No	Yes	Yes	Yes	Yes	Yes 80/20 only	Yes 80/20 only	*See note below	*See note below	**See note below	**See note below
Anti-Icing (80 gal/lane mile)	Yes, if prior to storm	Brine or Mix	Brine or Mix	Mix	Mix	No	No	No	No	No	No
	No, if storm has started										

80/20 mix will be 80% salt brine and 20% calcium chloride, January 1st to March 1st only, prewet @ spinner (25 gal/ton)

Calcium is 42% before adding to brine

Sand or chips only used with deputy director approval. Use sparingly as a last resort, until able to cut ice with grader or conditions improve.

- ↑ Conditions getting better
- ↓ Conditions getting worse

\*Do not prewet with brine or 80/20 mix when temperatures are below 0 degrees. If necessary, calcium chloride may be used **but never on new concrete streets.**

\*\*New concrete, **primary** streets will be salted the full length. Brine or 80/20 prewet only used on new concrete, primary streets.

\*\*New concrete, **secondary** streets will be spot salted at intersections only. **No 80/20 prewet** used on new concrete, secondary streets.

**Salt Calibration Options**

1. 100 pounds (standard)
2. 200 pounds
3. 300 pounds
4. Blast 600 lbs for 15 seconds
5. Trucks will mount plows (standard)

**Pre-Wet Calibration Options**

1. 15 gal/ton
2. 20 gal/ton
3. 25 gal/ton (standard)

**Salting Instructions**

Arterials & Collectors - Salt both directions (up and back)  
Residential Streets - Salt one direction (last pass only)

**Note 1: Plow mains when >1 inch of accumulation**

# WATER MAIN BREAK/ JOINT LEAK REPORT - JANUARY 2021

## YEARLY WATER MAIN BREAK COMPARISON

<u>MONTH 20</u>	<u>MONTH 21</u>	<u>YTD 20</u>	<u>YTD 21</u>
11	17	11	17

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
3431 S. Kernan Ave.	280159	DIP	12"	1978	2 1/2" Hole	4 Hours	253,244	\$1,539.72
NOTES: Call came in from the Police Dept. to our 3rd shift Street Sweepers. Duration is based on time of call.								
1829 N. Linwood Ave.	280166	CIP	8"	1961	1/4" Crack	5 Hours	321,610	\$1,955.39
NOTES: Resident called in water bubbling in road. Duration is based on time of call.								
425 Covenant Ct.	280168	DIP	8"	1980	4" Hole	4 Hours	579,862	\$3,525.56
NOTES: Police Dept. reported break. Duration is based on time of call to being fixed.								
94 Crestview Dr.	280169	CIP	8"	1961	1/16" Crack	4 Hours	60,779	\$369.54
NOTES: Police Dept. reported break. Duration is based on time of call to being fixed.								
Fourth St (West of Mason)		CIP	8"	1967	1/32" Crack	5 Days	815,431	\$4,957.82
NOTES: Break was found as noise was heard on hydrant. Duration is based on soil saturation. Leak was not repaired as its on a dead end line that's up for replacement this 2021 construction season. Valve was shut off.								

\*\*Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
1513 N. Outagamie St.	280365	CIP	8"	1953	1/16" Crack	6 Hours	77,359	\$470.34
NOTES: Street Sweeper found while out salting. Duration is based on soil duration and from finding to being fixed.								
1935 N. Bennett St.	280485	CIP	6"	1953	1/8" Hole	7 Days	23,181	\$140.94
NOTES: Heard noise on the hydrant. Duration is determined by soil saturation and the date of the last hydrant test.								
Easthaven Ct. & Schaefer St.	280579	DIP	8"	1980	4" Hole	4 Hours	608,164	\$3,697.64
NOTES: Police Dept. reported break. Duration is based on time of call to being fixed.								
1001 E. Florida Ave.	280580	CIP	8"	1969	1/64" Crack	10 Days	981,909	\$5,970.01
NOTES: Resident call in as sump pump was running. After starting repair, determined it was running for a little while.								
Pine St. & Douglas St.	280709	CIP	6"	1953	Two 3" Holes	20 Minutes	53,818	\$327.21
NOTES: Broke after water was turned back on. Was shut off right away.								
1617 W. Pine St.	280757	CIP	6"	1953	Three 3" Holes	2 Hours & 10 Minutes	176,132	\$1,070.88
NOTES: Water in road was called in. Repaired three holes, each hole was 3". Duration is based on time of call and soil saturation.								

\*\*Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
2425 N. Division St.	280792	CIP	6"	1957	1/16" Crack	8 Hours	70,618	\$429.36
NOTES: Reported by the Appleton Police Dept. Duration is based on soil saturation.								
Fidelis St. & Forest St.	280823	CIP	8"	1964	1/64" Crack	18 Days	1,467,776	\$8,924.08
NOTES: Noise was heard on the Hydrant and with correlator. Break never surfaced. Duration was based on the start of the year till it was found.								
1031 S. Mathias St.	280856	CIP	8"	1962	1/64" Crack	19 Days	517,234	\$3,144.78
NOTES: Found when testing the hydrant and with the correlator. Break never surfaced. Duration went back to the start of the year till it was found.								
Montclair Ct.	280903	CIP	8"	1964	1/64" Crack	20 Days	435,295	\$2,646.59
NOTES: Found when testing the hydrant and with the correlator. Break never surfaced. Duration went back to the start of the year till it was found.								
901 E. Capitol Dr.	281212	DIP	12"	1967	2" & 3" Hole	6 Hours	1,636,515	\$9,950.01
NOTES: Reported by the Appleton Police Dept. Duration is based on neighbor reports of hearing noises all night in her house.								
1733 N. Division St.	281409	CIP	6"	1950's	1/16" Crack	8 Hours	87,445	\$531.67
NOTES: Reported in by Police Dept. Duration is based on time of call and soil saturation.								

In addition to the dollar value of water revenue lost, there is an average cost of \$9,000 to repair each water main break (including final restoration) and an average cost of \$630 to produce the lost water for each main break.

\*\*Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.