

**AGENDA  
STORM WATER UTILITY  
COMMITTEE**

**MONDAY, MARCH 29, 2010  
ROOM 204  
5:00 P.M.**

***G. John Ruffolo, Chairman  
Donald K. Holland  
Patrick Juliana***

***Ray Misner  
Don L. Moldenhauer  
Anthony Nudo***

**A. APPROVAL OF MINUTES**

A-1 Approval of minutes of special meeting held on March 15, 2010.

**C. REFERRED TO COMMITTEE**

C-1 Stormwater Management Practices Maintenance Agreement (Access to Sites) By and Between the City of Kenosha, Wisconsin and Peterson's Golden Meadows Homeowners Association, Inc. **(District 17)**

C-2 Approval of revised yardwaste coupon in preparation for 2010 Spring / Fall Yardwaste seasons.

**INFORMATIONAL:**

1. Swale Restoration – River Crossing
2. Collapse Storm Sewer Multi-Plate – Holsum Bakery Outlet (5131 8<sup>th</sup> Avenue)

**CITIZENS COMMENTS RELATED ONLY TO JURISDICTION OF STORMWATER  
UTILITY COMMITTEE**

**ALDERMAN COMMENTS**

**IF YOU ARE DISABLED AND IN NEED OF ASSISTANCE CALL 653-4050 BEFORE NOON ON THE DATE INDICATED FOR THIS  
MEETING.**

**NOTICE IS HEREBY GIVEN THAT A MAJORITY OF THE MEMEBERS OF THE COMMON COUNCIL MAY BE PRESENT AT  
THE MEETING, AND ALTHOUGH THIS MAY CONSITUTE A QUORUM OF THE COMMON COUNCIL, THE COUNCIL WILL  
NOT TAKE ANY ACTION AT THIS MEETING.**

STORM WATER UTILITY COMMITTEE  
- MINUTES -

MONDAY, MARCH 15, 2010  
6:30 P.M.

G. John Ruffolo, Chairman  
Donald K. Holland  
Patrick Juliana

Ray Misner  
Don L. Moldenhauer  
Anthony Nudo

A special meeting of the Storm Water Utility Committee was held on Monday, March 15, 2010 in Room 202 of the Municipal Building. The following members were present: Acting Chairman Anthony Nudo, Aldermen Donald K. Holland, Patrick Juliana, Ray Misner, and Don L. Moldenhauer. Chairman G. John Ruffolo arrived during item C-1. The meeting was called to order at 6:37 pm. Staff member in attendance was Ron Bursek.

A-1 Approval of minutes of special meeting held on February 8, 2010.

*It was moved by Alderman Juliana, seconded by Alderman Moldenhauer to approve minutes. Motion passed 5-0.*

C-1 Resolution to Authorize Submittal of State Grant Application for a Municipal Flood Control Grant Project.

*It was moved by Alderman Moldenhauer, seconded by Alderman Holland to approve resolution. Motion passed 6-0.*

INFORMATIONAL:

Ron Bursek provided a copy of March 12, 2010 diesel fuel DNR report to the committee members.

ADJOURNMENT - There being no further business to come before the Storm Water Utility Committee, it was moved, seconded and unanimously approved to adjourn the meeting at 6:42 pm.



ENGINEERING DIVISION  
MICHAEL M. LEMENS, P.E.  
DIRECTOR/CITY ENGINEER

STREET DIVISION  
JOHN H. PRIJIC  
SUPERINTENDENT

0-1

ASSISTANT CITY ENGINEER  
SHELLY BILLINGSLEY, P.E.  
STORMWATER UTILITY

**Ronald L. Bursek, P.E., Director**

Municipal Building · 625 52<sup>nd</sup> ST · RM 305 · Kenosha, WI 53140  
Telephone (262) 653-4150 · Fax (262) 653-4056

March 25, 2010

To: G. John Ruffolo, Chairman  
Stormwater Utility Committee

From: Ronald L. Bursek, P.E.   
Director of Stormwater Utility

Subject: ***Maintenance Agreement – Peterson’s Golden Meadows***

**BACKGROUND INFORMATION**

Peterson’s Golden Meadows Homeowners Association. has submitted a Stormwater Management Practices Maintenance Agreement for the Stormwater Utility to access the property to conduct the functional maintenance required. With this agreement all homeowners within the association waive their credit availability to the Stormwater Utility since the Utility will be responsible for the costs of the functional maintenance of the detention basin. This agreement is also necessary for the Kenosha Stormwater Utility to claim this basin as a water quality basin for the benefits of the WinSLAMM analysis that is a requirement of the discharge permit.

**RECOMMENDATION**

Approve the Stormwater Management Practices Maintenance Agreement [Access to Sites] between the City of Kenosha and Peterson’s Golden Meadows Homeowners Association, Inc.

Document No.	<p align="center"><b>STORMWATER MANAGEMENT PRACTICES MAINTENANCE AGREEMENT -- [ACCESS TO SITES]</b></p>
<p align="center"><b>STORMWATER MANAGEMENT PRACTICES MAINTENANCE AGREEMENT -- [ACCESS TO SITES]</b></p> <p align="center"><b>By And Between</b></p> <p align="center"><b>THE CITY OF KENOSHA, WISCONSIN, A Wisconsin Municipal Corporation,</b></p> <p align="center"><b>And</b></p> <p align="center"><b>PETERSON'S GOLDEN MEADOWS HOMEOWNERS ASSOCIATION, INC., A Non-Stock Corporation</b></p>	

Recording Area

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Return This Document To:

Director, Stormwater Utility,  
625 – 52nd Street, Room 305,  
Kenosha, Wisconsin 53140

Parcel No(s).03-122-05-125-401  
03-122-05-136-301  
03-122-05-138-312

**THIS AGREEMENT**, Made and entered into by and between the **CITY OF KENOSHA, WISCONSIN**, a Wisconsin municipal corporation, hereinafter referred to as "**CITY**", and **PETERSON'S GOLDEN MEADOWS HOMEOWNERS ASSOCIATION, INC.**, a non-stock corporation, hereinafter referred to as "**OWNER**".

**WITNESSETH:**

**WHEREAS, OWNER** is the owner and/or Association of owner's of the following described parcel(s) of real property that have a Stormwater Management Facility thereon, situated in the City of Kenosha, County of Kenosha, State of Wisconsin; to wit:

**All of Outlot 1 in Peterson's Golden Meadows, a subdivision being in part of the Northeast Quarter and the Southeast Quarter of the Northwest Quarter, and in the Northeast Quarter, the Northwest Quarter, the Southeast Quarter and the Southwest Quarter of the Northeast Quarter of Section 5, Town 1 North, Range 22 East, in the City of Kenosha, Kenosha County, Wisconsin, and recorded on May 30, 2003 in Document 1330751 with the Kenosha County Register of Deeds Office.**

**All of Outlot 1 in Peterson's Golden Meadows South, a re-division of Outlot 2 and Outlot 3 of Peterson's Golden Meadows (subdivision), said Peterson's Golden Meadows South being in a part of the Northeast Quarter, the Northwest Quarter, the Southeast Quarter and the Southwest Quarter of the Northeast Quarter of Section 5, Town 1 North, Range 22 East, in the City of Kenosha, Kenosha County, Wisconsin, and recorded on November 5, 2003 in Document 1361367 with the Kenosha County Register of Deeds Office.**

**Part of Outlot 4 in Peterson's Golden Meadows South, a re-division of Outlot 2 and Outlot 3 of Peterson's Golden Meadows (subdivision), said Peterson's Golden Meadows South being in a part of the Northeast Quarter, the Northwest Quarter, the Southeast Quarter and the Southwest Quarter of the**

Northeast Quarter of Section 5, Town 1 North, Range 22 East, in the City of Kenosha, Kenosha County, Wisconsin, and recorded on November 5, 2003 in Document 1361367 with the Kenosha County Register of Deeds Office, and said Part of Outlot 4 being further described as: All of Outlot 4 in said Peterson's Golden Meadows South, except the parcel of land described in a Warranty Deed recorded as document 1555780, on May 2, 2008 from Peterson's Golden Meadows HOA (Homeowners Association) to Jeffrey and Monica Peadro.

hereinafter referred to as "**PROPERTY**".

**WHEREAS**, as a condition of the development of the subdivision commonly known as Peterson's Golden Meadows, a Stormwater Management Facility was required to be constructed for the benefit of the residents of the subdivision; and,

**WHEREAS**, the **CITY**, the **OWNER**, and the **OWNER'S** successors and assigns, including any owners association, agree that the health, safety and welfare of the residents of the City of Kenosha, Wisconsin, require that the Stormwater Management Facility on the **PROPERTY** be maintained; and,

**WHEREAS**, the **CITY** requires that on-site Stormwater Management Practices are performed by the **OWNER** and the **OWNER'S** successors and assigns, including any owners association.

**NOW, THEREFORE**, in consideration of the mutual agreements of the parties, **CITY** and **OWNER** agree as follows:

**1. Definitions.**

a. "**Stormwater Management Practices**" shall mean the performance of any and all tasks necessary to keep the Stormwater Management Facility in good operating condition such that it is performing its functions as designed.

b. "**Stormwater Management Facility**" shall mean all facilities, including, but not limited to, berms, outlet structures, basin areas and access roads constructed for the purpose of controlling the quantity and quality of stormwater runoff, snow or ice water runoff, and surface runoff and drainage.

**2. CITY'S Responsibilities.** The **CITY** shall adequately maintain the Stormwater Management Facility, including, but not limited to, all pipes and channels built to convey stormwater to the facility, as well as all related structures in accordance with **CITY'S** Stormwater Maintenance Standards, attached hereto as Exhibit "A". The **CITY** shall review **OWNER'S** performance of its Stormwater Management Practices as often as conditions require, but in any event at least once each year. Further, **CITY**, in its sole discretion, shall have the right to modify **OWNER'S** responsibilities set forth in Exhibit "B". Given **CITY'S** obligations herein, it shall not provide any credit for Stormwater Utility charges for maintenance of the Stormwater Management Facility to any real property owner, including, but not limited to, **OWNER**, or individual residents of Peterson's Golden Meadows Subdivision.

**3. OWNER'S Responsibilities.** **OWNER** shall perform Stormwater Management Practices as more particularly described in Exhibit "B" attached hereto.

**4. Access.** The **OWNER**, and the **OWNER'S** successors and assigns, including any owners association, hereby grant permission to the **CITY**, its authorized agents and employees, to enter upon the **PROPERTY** in accordance with with designated access easements to inspect and conduct maintenance activities of the Stormwater Management Facility whenever the **CITY** deems necessary.

**5. No Liability.** Under this Agreement, the **CITY** assumes no responsibility or any liability in the event the Stormwater Management Facilities fail to operate properly in the absence of any negligence on the part of the **CITY**.

**6. Binding Effect.** This Agreement shall be recorded at the Kenosha County Register of Deeds, and shall constitute a covenant running with the land, and shall be binding on the **OWNER** and the

**OWNER'S** administrators, executors, assigns, heirs and any other successors in interest, including any owners associations. The **OWNER** shall provide the Director of the **CITY** Stormwater Utility with a copy of any document which creates an owners association that is responsible for the Stormwater Management Practices. Further, this Agreement shall be attached as an exhibit to any document which creates an owners association that is responsible for maintenance of the Stormwater Management Practices.

**7. Notices.** All notices, requests, demands and other matters required to be given, or which may be given hereunder, shall be in writing and shall be deemed given when delivered in person or when deposited in the United States mail, registered or certified, return receipt requested, postage prepaid, or equivalent private delivery service, addressed to the respective parties at the addresses stated below or such addresses as the parties indicate in writing:

**a. OWNER:**

President, Peterson's Golden Meadows Homeowners Association, Inc.,  
Ogden & Company, Inc., AMO  
1665 N. Water Street  
Milwaukee, Wisconsin, 53202.

**b. CITY:**

Director, Stormwater Utility,  
City of Kenosha,  
Room 305, 625 - 52<sup>nd</sup> Street,  
Kenosha, Wisconsin 53140.

**8. Miscellaneous.**

**a. Laws of Wisconsin.** The interpretation of this Agreement will be governed by and construed and enforced in accordance with the laws of the State of Wisconsin. Any provision of this Agreement which is prohibited by the laws of the State of Wisconsin shall be ineffective only to the extent of such prohibition without invalidating the remaining provisions which shall continue in full force and effect.

**b. Authority To Enter Into Agreement.** Each of the undersigned hereby represents and warrants that: (a) such party has all requisite power and authority to execute the Agreement; (b) the execution and delivery of this Agreement by the undersigned, and the performance of its terms thereby have been duly and validly authorized and approved by all requisite action required by law; and (c) this Agreement constitutes the valid and binding agreement of the undersigned, enforceable against each of them in accordance with the terms of the Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed on the dates below given.

**CITY OF KENOSHA, WISCONSIN,  
A Wisconsin Municipal Corporation,**

BY: \_\_\_\_\_  
KEITH G. BOSMAN, Mayor  
Date: \_\_\_\_\_

BY: \_\_\_\_\_  
MICHAEL K. HIGGINS,  
City Clerk/Treasurer/Assessor  
Date: \_\_\_\_\_

STATE OF WISCONSIN )  
                                  :SS.  
COUNTY OF KENOSHA )

Personally came before me this \_\_\_\_\_ day of \_\_\_\_\_, 2010, **KEITH G. BOSMAN, Mayor**, and **MICHAEL K. HIGGINS, City Clerk/Treasurer/Assessor**, of the **CITY OF KENOSHA, WISCONSIN**, a Wisconsin municipal corporation, to me known to be such Mayor and City Clerk/Treasurer/Assessor of said municipal corporation, and acknowledged to me that they executed the foregoing instrument as such officers as the Agreement of said corporation, by its authority.

\_\_\_\_\_  
\_\_\_\_\_  
Notary Public, Kenosha County, Wisconsin  
My Commission expires/is: \_\_\_\_\_

PETERSON'S GOLDEN MEADOWS HOMEOWNERS ASSOCIATION, INC.,  
A Non-Stock Corporation,

BY: [Signature]  
SHAWN DELANEY, President  
Date: 2/23/10

STATE OF Illinois  
COUNTY OF Lake :SS.

Personally came before me this 23<sup>rd</sup> day of February, 2010, SHAWN DELANEY, President, of the PETERSON'S GOLDEN MEADOWS HOMEOWNERS ASSOCIATION, INC., a non-stock corporation, to me known to be such President, and acknowledged that they executed the foregoing instrument as such officers as the agreement of said corporation, by its authority.

[Signature]  
Notary Public, Illinois County, Lake  
My Commission expires/is: 05/21/2012



Drafted By:  
WILLIAM K. RICHARDSON,  
Assistant City Attorney

## **Stormwater Maintenance Standards – CITY Requirements**

### Wet Detention Basin

1. **Outlet Structure Maintenance:** Trash grates shall be examined for debris accumulation after any storm that has significant runoff (observed flow in street gutters). Any debris on the trash grate shall be removed and disposed of offsite. If significant debris has passed the trash grates, it will be necessary to lift the grate to remove that debris. If debris passing the trash grate or vandals attempting to plug the outlet is a problem, then revisions should be made in the trash grate. Any time a trash grate needs replacement, the replacement grate must be constructed of stainless steel. Any blockage of the basin outlet must be addressed immediately. Blockage of the lower stages of the outlet structure must be cleared within 48 hours to avoid substantial die-off of the flooded grass areas. Any time a substantial portion of the grass area becomes damaged, the entire bottom area of the detention basin will need to be reseeded.
2. **Downstream Stormwater Conveyance:** Upon detection of storm water failing to completely drain down to the basin discharge elevation, an investigation shall be made to determine the cause. Any obstruction or sediment buildup in the downstream pipes or drainage-way must be removed within 30 days and any damage to the basin such as wave terraces or grass die-off due to the water back up shall be repaired.
3. **Sediment removal:** Soundings shall be taken every 5 years to determine the amount of sediment deposition. More than 2 feet of sediment in any area shall require excavation of the sediment from that area. If more than 25% of the pond bottom has greater than 1 foot of sediment the entire pond will need to be dredged or excavated to the original elevation.

**Stormwater Maintenance Standards – Peterson’s Golden Meadows  
Homeowners Association, Inc. Requirements**

1. Greenspace: Vegetation shall be maintained to prevent erosion caused by stormwater runoff. An inspection shall be made at least every 6 months. If vegetation is no longer in good condition it shall be replanted.
  
2. Wet Detention Basins
  1. Mowing: The grass areas must be mowed when the grass reaches a height of 6 inches or monthly during the growing season – whichever occurs first. At no time shall the detention basin be mowed when the bottom or side slopes are still soft after recent storage of storm water. Any ruts created by mowing shall be graded closed or filled with topsoil, seeded, and covered with a tackifier type mulch within one week of the damage. The type of mower used shall be such that a mulch type grass clipping is produced. Grass cut only at the ground level, such as with a sickle bar, tends to be carried to the outlet by storm water where it plugs the trash grate. Any vegetation growing at the edge of a permanent pond shall not be mowed since this ruts the edge of the pond and puts debris in the water. Any undesirable vegetation around the permanent pond should be removed mechanically and in accordance with DNR regulations and guidelines.
  2. Maintenance of Plantings: All planting of trees and bushes shall be maintained in good condition. An examination of the plantings shall be made each Spring and Fall and any dead trees or bushes replaced at that time. The replacement shall be in kind or with a suitable species approved by the City Forester. All planting shall receive regular watering during the first few years until they become well established. Mulch beds shall be maintained around the plantings to discourage the growth of weeds and to conserve moisture. The area immediately around the plantings shall be kept free of weeds by pulling or weed whipping each time the grass is mowed. Bushes mowed off or tree bark girdled by the mowing equipment shall be replaced by a specimen of similar size.
  3. Erosion: Any area bare of suitable vegetation shall, within 30 days of discovery or the onset of suitable weather, have any erosion repaired, filled with three inches of topsoil, seeded, and covered with a tackifier type mulch. On slopes of 10 to 1 or greater the repair shall be covered with turf reinforcement before placement of the top two inches of topsoil.

4. Invasive plant species: Invasive plant species such as purple loose strife or canary reed grass shall not be allowed to become established in the detention basin. At the detection of such species a control program shall be established and progress in their control shall be included in the yearly report.
5. Use of chemicals: No fertilizer or weed killer shall be used with the detention basin parcel.
6. Alterations to the detention basin: No alterations may be made to the detention basin in the way of grading, additional discharges to the basin, plantings etc without permission from the Storm Water Utility.
7. Control of water plants: Some water plants are desirable as they provide a balance environment for aquatic life and aid in the removal of nutrients from the storm water. Growth along the edge of the pond stabilizes the shoreline against erosion and discourages geese from using the pond. Excessive growth should be controlled by mechanical removal of the plants. Any use of chemicals in the pond must be in conformance with DNR regulations and guidelines and receive prior approval from the Kenosha Stormwater Utility. If the shoreline erodes due to lack of proper stabilization some other means of protection such as the placement of boulders will be required. The control of algae is not a required maintenance item since the objection to algae is mainly based on esthetics.

## Stormwater Operation and Maintenance Report

Owner: _____ Parcel No.: _____ City: _____ Zip: _____	Phone No.: _____ Address: _____ State: _____ Contact Name: _____			
Date of Inspection (mm/dd/yy): _____				
Inspection <input type="checkbox"/> 6 Month <input type="checkbox"/> Other _____				
Time of Inspection	Start: _____ End: _____			
Name of Individual Performing Inspection (please print): _____				
Weather Conditions during Inspection: _____				
<b>Stormwater Facility Inspection</b>				
Condition	Good	Bad	Requires Maintenance	Notes: (Condition / Corrective Action)
<b>General Site Conditions</b>				
Greenspace				
<b>Wet Detention Basin</b>				
Mowing (Monthly or >6")				
Condition of Plantings				
Condition of Water Plants				
Erosion				
Invasive Plants	Yes	No		
Signature of Inspector _____		Date _____		
Signature of Owner _____		Date _____		



ENGINEERING DIVISION  
MICHAEL M. LEMENS, P.E.  
DIRECTOR/CITY ENGINEER

STREET DIVISION  
JOHN H. PRIJIC  
SUPERINTENDENT

ASSISTANT CITY ENGINEER  
SHELLY BILLINGSLEY, P.E.  
STORMWATER UTILITY

Ronald L. Bursek, P.E., Director

Municipal Building · 625 52<sup>nd</sup> ST · RM 305 · Kenosha, WI 53140  
Telephone (262) 653-4150 · Fax (262) 653-4056

TO: G. John Ruffolo, Chairman  
Stormwater Utility Committee  
FROM: Jan Schroeder *JDS*  
SUBJ: Revised Yardwaste Coupon  
DATE: 3/29/2010

In 2004, the City of Kenosha Department of Public Works required the use of biodegradable bags for curbside yardwaste collection. Along with being environmental friendly, the use of biodegradable bags reduced annual operational costs by approximately \$225,000.

In 2009, the City offered a \$2 coupon per box or bundle of 10 biodegradable bags to offset the cost of the bags and encourage the use of the bags. The City contracted with Mandlik & Rhodes (MRIS) to manage the processing of the coupons. As of the most recent invoice from MRIS, dated March 15, 2010, the city has financed more than 5,600 coupons redeemed by local residents at Kenosha stores.

The current coupon expires April 15, 2010 and a draft of the revised coupon is below for your review and approval. As in 2009, City staff will conduct outreach to local stores to explain the City of Kenosha Yardwaste Coupon program and inform the store managers of the revised City Yardwaste Coupon.

The revised draft of the second yardwaste coupon contains the following required information:

- Expiration Date: 12/31/2010
- Limit of four (4) boxes of biodegradable bags **per visit**
- To continue proper tracking , a coupon must be redeemed for each box of bags sold

The next version of the Yardwaste Coupons will be available at MOB, Kenosha Water Utility and on the city's website.

*To be professionally set-up at printers*

**\$2.00**

**OFF**

**(Box of 10 bags)**

**NO CASH VALUE**

**MAIL TO:**  
City of Kenosha  
c/o Mandlik & Rhodes  
PO Box 490, Dept #1044  
Tecate, CA 91980

**OFFER CODE: 10202001**

**CITY OF KENOSHA, WI - APPROVED**

**BIODEGRADABLE YARDWASTE BAGS**

VOID

**BIOBAG<sup>®</sup>**

**BAG TO NATURE<sup>™</sup>**

**ECOGUARD<sup>™</sup>**

**LIMIT: One Coupon per box.**

**Limit of four (4) coupons per visit.**

*"To encourage composting and help offset the cost of biodegradable bags."*

**DOESN'T APPLY TO PREVIOUS PURCHASES**

**VALID ONLY AT KENOSHA-AREA RETAILERS**

**Expiration Date:**  
**12/31/2010**



ENGINEERING DIVISION  
MICHAEL M. LEMENS, P.E.  
DIRECTOR/CITY ENGINEER

STREET DIVISION  
JOHN H. PRIJIC  
SUPERINTENDENT

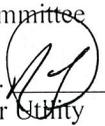
ASSISTANT CITY ENGINEER  
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March 25, 2010

To: G. John Ruffolo, Chairman  
Stormwater Utility Committee

From: Ronald L. Bursek, P.E.   
Director of Stormwater Utility

Cc: Alderman Bogdala – District 17

Subject: *Swale Restoration – River Crossing*

**BACKGROUND INFORMATION**

The River Crossing Swale has become a maintenance issue in recent years. Since the swale was designed with a very flat pitch and is designed as the main storm water conveyance system within River Crossing Subdivision, and since sump pumps in the neighborhood run almost constantly, it remains wet during a high percentage of the year. The constantly wet soil makes the maintenance of the swale very difficult.

Stormwater Utility staff has reviewed a variety of solutions with the alderman of the district and have decided to convert a portion of the swale into a modified bioswale. The bioswale will absorb low flows while still functioning as the drainage swale during heavy rains. By absorbing the low flows the bioswale will have greater water quality aspects in that it helps infiltrate low flows. A bioswale works because the plantings selected for the swale are deep-rooted native plants that will naturally draw the water down into the soil. A bioswale will also require less maintenance as it will only be required to be mowed once a year for annual maintenance.

Staff has been working with Nan Calvert, an Ecological Consultant with Environmental Education for Everyone, to develop a planting plan for the swale that will provide the needed functions as well as adding aesthetic value. Staff is currently negotiating a contract with Environmental Education for Everyone for plan development. It was decided that the SWU would convert the swale along the lengths of two properties (impacting four residents) as a demonstration program to monitor the functionality of the swale and also ensure that the plantings are thriving in this environment. The demonstration program will be located near the center of the swale where the most saturated soils were documented. Attached is an exhibit showing the location of the properties that will be adjacent to the demonstration site.

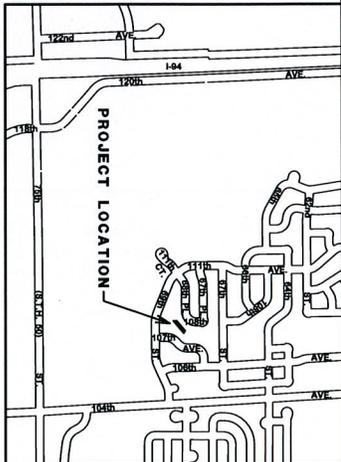
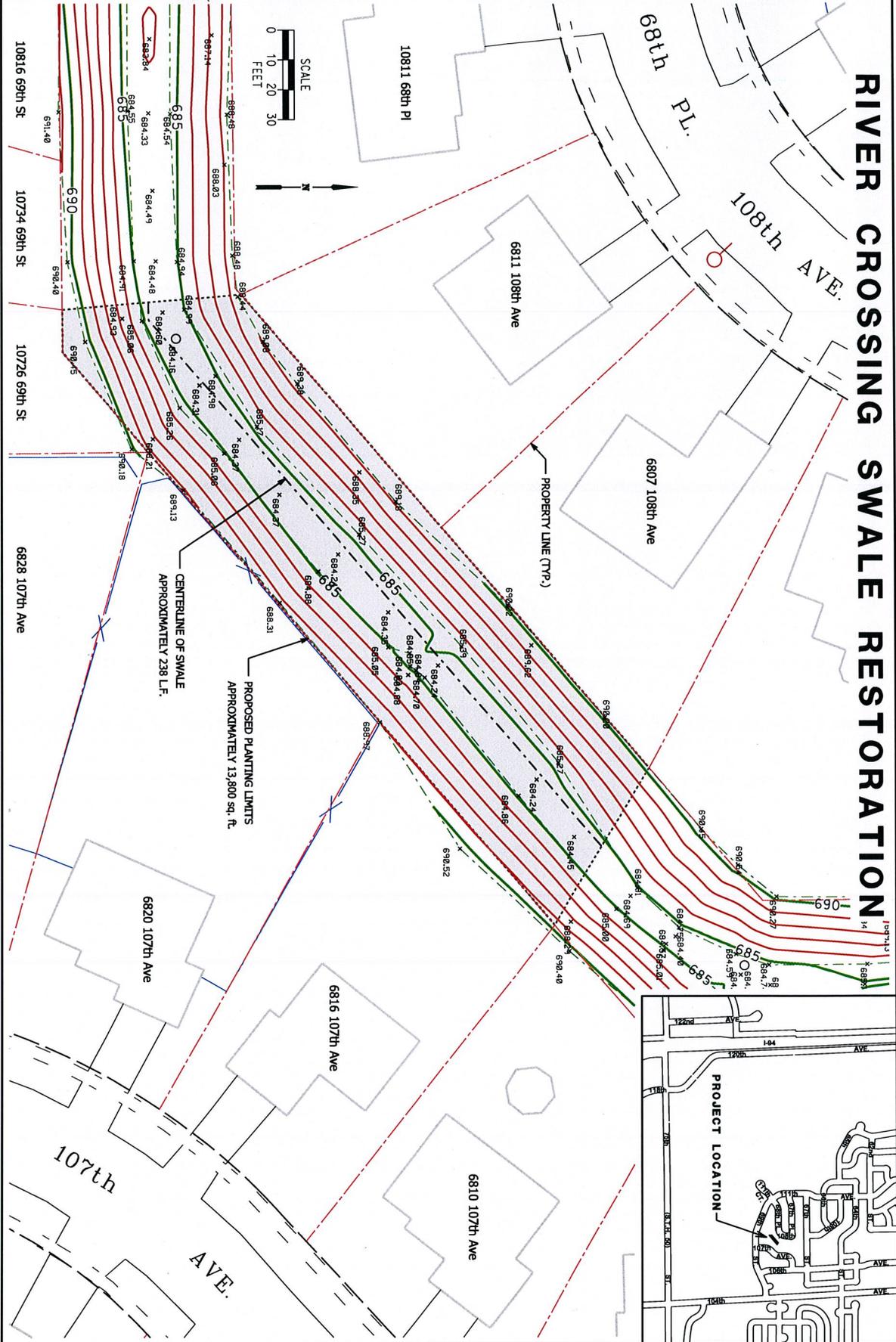
Currently, the SWU is planning on utilizing volunteers for the planting and maintenance of the swale and has been teaming with Keep Kenosha Beautiful. KKB and the SWU submitted a request to the University of Wisconsin – Parkside for an independent work study that would provide ecology students the opportunity to be involved in the planting, monitoring, documenting, maintenance and education of the swale plantings. KKB and the SWU are still waiting to hear if the independent work study will be accepted by the University.

This project was included in the 2010-2014 Capital Improvement Program under Project SW-10-005.

**RECOMMENDATION**

Informational Only – No Action Required

# RIVER CROSSING SWALE RESTORATION



REVISIONS	Survey By : _____ Date : _____	Design By : _____ Date : _____	Drawn By : _____ Date : _____	Checked By : _____ Date : _____	Approved By : _____ Date : _____
<b>CITY OF KENOSHA</b> <b>DEPARTMENT OF PUBLIC WORKS - ENGINEERING</b>					
625 52nd St., Room 302 Kenosha, Wisconsin 53140 ph (262) 653-4150 fax (262) 653-4056					
<b>RIVER CROSSING SWALE RESTORATION</b>				JOB NO. _____	Sheet No. _____ of pgx _____



ENGINEERING DIVISION  
MICHAEL M. LEMENS, P.E.  
DIRECTOR/CITY ENGINEER

STREET DIVISION  
JOHN H. PRIJIC  
SUPERINTENDENT

ASSISTANT CITY ENGINEER  
SHELLY BILLINGSLEY, P.E.  
STORMWATER UTILITY

**Ronald L. Bursek, P.E., Director**

March 25, 2010

Municipal Building · 625 52<sup>nd</sup> ST · RM 305 · Kenosha, WI 53140  
Telephone (262) 653-4150 · Fax (262) 653-4056

To: G. John Ruffolo, Chairman  
Stormwater Utility Committee

From: Ronald L. Bursek, P.E.   
Director of Stormwater Utility

Subject: *Collapse Storm Sewer Multi-Plate – Holsum Bakery Outlet (5131 8<sup>th</sup> Avenue)*

**BACKGROUND INFORMATION**

The Stormwater Utility was notified on Friday, March 19 of a sinking area in the parking lot of Holsum Bakery Outlet located at 5131 8<sup>th</sup> Avenue. Staff assessed the location on Friday and installed barricades over the affected area until the condition of the large multi-plate storm sewer system beneath the parking lot could be assessed.

Staff met on Monday to discuss methods of assessing the condition of the system. It was determined that Street Division would try to enter the system near 52<sup>nd</sup> Street and attempt to conduct a visual inspection of the system from inside the sewer pipe.

On Tuesday staff lowered a small row boat down into the system and observed that the 13 foot diameter multi-plate system was failing at the location of the sunken pavement of the parking lot. Numerous pictures were taken of the condition of the system from 52<sup>nd</sup> Street to the collapsing section.

Upon identifying the extent of the damage it was decided that the area would be excavated to take the load off of the pipe to avoid further damage. It was arranged that a rented excavator would arrive on site on Wednesday morning.

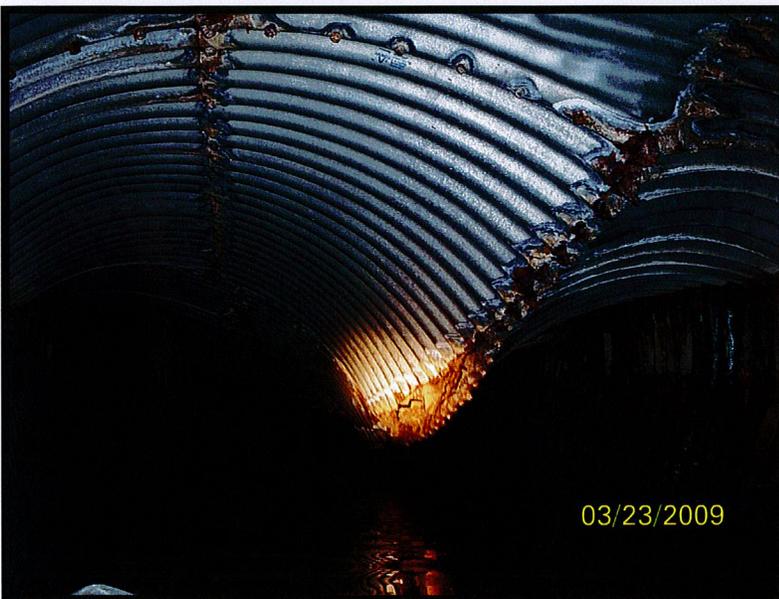
When the Street Division arrived at the jobsite on Wednesday morning it was observed that the pipe collapsed further as the sink hole became quite large over night. Street Division began digging to try to avoid any further damage. A temporary chainlink fence was delivered to the jobsite on Thursday early afternoon to secure the excavation until an emergency repair can be made.

Staff is working diligently to determine the method of the repair while trying to avoid further damage that may result in failure of the storm sewer conveyance system transporting of stormwater.

The following are a few pictures that were taken over the course of the storm sewer collapse.



This picture shows the extent of the pavement damage as seen on Friday, March 19.



The pipe as visually inspected on Tuesday, March 23. The top of the multi-plate storm sewer was collapsing into a "V".



This picture shows the extent of the pavement damage that was observed on Wednesday, March 24.

**RECOMMENDATION**

Informational Only – No Action Required