

City of Leavenworth, Kansas



January 1, 2018 – December 31, 2018

Kansas Permit No: M-MO12-SN01

Federal Permit No: KSR044011

February 28, 2019

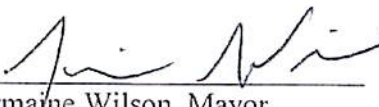
RESOLUTION NO. B-2215

BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY
OF LEAVENWORTH, KANSAS, AS FOLLOWS:

SECTION 1: The 2018 Annual Report for Stormwater reflects the direction, efforts and accomplishments by City of Leavenworth for calendar year 2018. It shall be an official record of these actions to meet the requirements of Kansas Department of Health and Environment (KDHE) for an Annual Report until or unless changed by official action.

PASSED AND APPROVED This 26th Day of February 2019.





Jermaine Wilson, Mayor

ATTEST:


Carla K. Williamson, CMC, City Clerk



February 27, 2019

Mr. Rance Walker
KDHE Bureau of Water
1000 SW Jackson, Suite 420
Topeka, KS 66612-1367

RE: **2018 KDHE Report on Stormwater
City of Leavenworth**

Please find the following submitted for compliance with 2018 Annual Report for Stormwater.

- CD containing final report with signed certification and the PDF file of Leavenworth stormwater system and outfalls, and other structures.

Please do not hesitate to call me at 913.684.0375 if you have any questions.

Sincerely,

Michael G. McDonald, P.E.
Director of Public Works

LEAVENWORTH
 330 SHAWNEE ST
 LEAVENWORTH
 KS
 66048-9998
 1950380593
 02/27/2019 (800)275-8777 1:23 PM

Product Description	Sale Qty	Final Price
PM 2-Day Flat Rate Env (Domestic) (TOPEKA, KS 66612) (Flat Rate) (Expected Delivery Date) (Friday 03/01/2019) (USPS Tracking #) (9505 5154 1992 9058 3050 27)	1	\$7.35
Insurance (Up to \$50.00 included)	1	\$0.00
Total		\$7.35
Credit Card Remitd (Card Name:VISA) (Account #:XXXXXXXXXXXX7201) (Approval #:017832) (Transaction #:551) (AID:A0000000031010) (AL:VISA CREDIT) (PIN:Not Required)		\$7.35

Includes up to \$50 insurance
 Text your tracking number to 28777 (2USPS) to get the latest status. Standard Message and Data rates may apply. You may also visit www.usps.com USPS Tracking or call 1-800-222-1811.

Save this receipt as evidence of insurance. For information on filing an insurance claim go to <https://www.usps.com/help/claims.htm>

Preview your Mail
 Track your Packages
 Sign up for FREE @ www.informedelivery.com

All sales final on stamps and postage
 Refunds for guaranteed services only
 Thank you for your business

HELP US SERVE YOU BETTER

TELL US ABOUT YOUR RECENT POSTAL EXPERIENCE

Go to:
<https://postalexperience.com/Pos>
 840-5640-0683-002-00022-69186-02

or scan this code with your mobile device:



or call 1-800-410-7420.

YOUR OPINION COUNTS

Bill #: 840-56400683-2-2269186-2
 Clerk: 09

CITY OF LEAVENWORTH

Kansas Stormwater Annual Report form for Municipal Separate Storm Sewer Systems (MS4) January 1, 2018 – December 31, 2018

TABLE OF CONTENTS

1. Section A – Local Government Information
2. Section B – Executive Summary
3. Section B, C, D and Stormwater Management Program
4. Section E – Stormwater Management Program Requirements
(Sections E1 – E 7)
5. Section F – Record Keeping and Reporting (2018 Sampling Program)
6. Section G – Final Report and Certification
7. Appendix A – Summary of Sampling Data with Maps (2014-2018)
8. Appendix B – TMDL - N/A; however, sampling information is included in Appendix A
and Appendix C
9. Appendix C – Comments related to measurement of rainfall and stream state with
comments
10. Appendix D – Selected Supporting Documentation for Stormwater Management
Program (Section E)
 - BMP 1 & 2 – Public Education and Outreach and Public Involvement and
Participation
 - BMP 3 – Illicit Discharge Detection and Elimination (IDDE)
 - BMP 4 – Construction Site Stormwater Runoff Control
 - BMP 5 – Post-Construction Site Stormwater Management in New Development
and Redevelopment
 - BMP 6 – Municipal Pollution Prevention/Housekeeping
 - BMP 7 – N/A for City of Leavenworth
11. Appendix E – DVD Delivery of Storm Sewer Map and Links

Section A

Local Government Information

KANSAS STORMWATER 2018 ANNUAL REPORT FORM
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Check box if this is a new name, address, phone, etc.

Permittee Information

Permittee (Agency Name) Mailing Address 1: City of Leavenworth

Mailing Address 2: 100 N. 5th Street

City: Leavenworth

State: Kansas

Zip Code: 66048

MS4 Program Contact Person Michael G. McDonald

Contact E-Mail Address: mmcdonald@firstcity.org

Contact Phone Number: 913-684-0375

Construction Issues Contact Person: Mike Hooper

Contact E-Mail Address: mhooper@firstcity.org

Contact Phone Number: 913-684-0375

Kansas Permit Number: M-MO12-SN01

(Example) M – MC21 – SU01

Reporting Period covers activities from January 1, 2018 through December 31, 2018

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28, 2019. This annual report must be submitted as a word or PDF file to KDHE on a standard compact disk (CD). A paper copy of the report may, in addition to the CD, be submitted if the permittee so desires, but it is not required. **In addition**, provide the current copy of the Stormwater Management Program (SMP) Document as a word or PDF file on the CD.

Section B

Executive Summary

SECTION 1: EXECUTIVE SUMMARY

To satisfy the requirements of the NPDES permit, this annual report summarizes the City of Leavenworth's plans and actions to reduce the discharge of pollutants from the municipal separate storm sewer system (MS4) to the maximum extent practicable, to protect water quality, and to meet the appropriate water quality requirements of the Clean Water Act. The information contained within this report was obtained through interviews with City staff, review of permits and projects from 2018, and examining communications and publications made available to the citizens of Leavenworth.

City staff communicated the awareness of water quality with efforts in several areas during 2018. These activities continue efforts from previous years including review of the annual report, stormwater guidelines and the "Land Disturbance Permit" (LDP) process.

A critical addition to the work effort in 2018 was the City Commission approval of the implementation of a stormwater fee to fund stormwater construction projects. This legislation created a dedicated funding source from a fee that is billed on the property tax statements. There were 6 Commission meetings (study sessions and regular meetings) open to the public that occurred during this process in 2018, and many more in previous years. Replacement of old metal pipe at 3118 Iowa Street in December 2018 is considered the first project of the new utility.

The importance of construction site runoff control was communicated to developers and contractors through issuing of "Land Disturbance Permits" for nearly all construction activities. City staff also contacted developers, contractors and others for enforcement of the regulations.

The City saw overall reductions in Sanitary Sewer Overflow (SSO) events that impacted Waters of the United States between 2017 and 2018. A reduction was also noted in the number of overflow reports filed with KDHE. The aggressive commercial grease trap inspection program by the building inspectors continued with on-site inspections and review of maintenance records.

The City water quality sampling program for Three-Mile and Five-Mile Creeks continued. Six storms were sampled in 2018. Staff has been able to sample effectively during rainfall events; however, the response of local streams to rainfall creates some timing issues to meet KDHE guidelines. In a broad non-scientific overview of five years of testing data, it appears that water quality is usually diminished as it passes through Leavenworth. Three-Mile Creek generally shows a greater decrease in quality than Five-Mile Creek; however, 2018 data indicates substantially greater degradation in Five-Mile Creek than in Three-Mile Creek.

Stormwater quality and runoff control from construction projects continues to be addressed during the planning phase of projects. The Development Review Committee (DRC) provides an informal forum as well as advice and guidance to applicants prior to the detailed design process. Stormwater quantity and quality issues are discussed. The creation of the Land Disturbance Permit process includes standard drawings and acknowledgements by owners and/or contractors related to their responsibilities for managing water quality from their site. Requirements related to providing an "Operations and Maintenance Manual" to the owner of any water quality features have been added.

City staff have inspected erosion-control installations and notified contractors and owners regarding necessary follow-up repairs with generally positive results.

The EPA "Special Environmental Project" (SEP) was completed in 2017. This project near Ottawa Street between 7th Street and Broadway contains several water quality features in addition to the basic design to address neighborhood flooding issues. Key project features have been included in other City and development projects at 2nd/Cherokee and 6th/Cherokee.

One of the least effective parts of the stormwater management program lies with managing existing BMPs on private residential developments. Lack of maintenance to detention ponds by Home Owner Associations (HOAs) continues to be a concern by both the HOAs and the City. City staff and City attorney have been working on an approach to improve responses from HOA although no action has been taken. BMPs installed on commercial and industrial properties have generally been maintained in accordance with expectations.

City staff continued outreach to owners/operators of current detention ponds in the City during 2018 with a mailing containing basic information on maintenance of ponds, and held a meeting on March 22nd 2018. This informational meeting reviewed owner responsibilities (especially keeping records of their maintenance activities) and City expectations. City staff also indicated that a fee/fine structure was likely to be installed created for BMP maintenance in 2018 or 2019. The meeting was well received with over 9 attendees and an additional 12 contacts via email/telephone contact.

The inspection and enforcement of the LDP and grease trap regulations continues. As noted in the previous year and while initial compliance is very good, the on-going maintenance and self-inspection of these facilities is lacking. Compliance with City expectations improved in 2018 as the programs became better understood by both staff and citizens.

Efforts to reach out, educate and inform the citizens of Leavenworth through media such as the newspaper, City website, the local cable television station (Channel 2), YouTube, Facebook, and Twitter have increased public awareness of environmental issues in general. The meetings regarding the implementation of a stormwater fee generated additional public interest.

City Staff have not identified any recommended changes to the SMP for consideration by the Commission. KDHE is expected to issue a new five-year MS4 permit in 2019 which will have requirements for a new Stormwater Management Program, and several new initiatives will be considered at that time.

Sections B, C, D

KDHE Discussion of Six Minimum Controls and Stormwater Management Program

**B – Stormwater Management Program
with Resolution No. B-2216**

C – TMDL – N/A

D – TMDL Table – N/A

CITY OF LEAVENWORTH

Kansas Stormwater Annual Report Form for Municipal Separate Storm Sewer Systems

January 1, 2018 – December 31, 2018

Kansas Permit No: M-MO12-SN01

B. Stormwater Management Program

Please place an "X" in the left boxes below to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the Stormwater Management Program (SMP) been developed and implemented?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has the SMP been modified or updated during this reporting period?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If the answer to question 2 above was "yes," has the modified SMP been submitted to KDHE for review?

C. Total Maximum Daily Load (TMDL) Best Management Practices

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Were any BMPs intended to attenuate the discharge of TMDL regulated pollutants implemented? See your permit to determine if TMDL regulated pollutants are listed for the receiving stream affected by your stormwater system.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	List all of the BMPs intended to attenuate the discharge of TMDL regulated pollutants as identified in the SMP and provide the requested information in the following table.

List all the TMDL BMPs as identified in the SMP and provide the requested information in the following table.

D. TMDL BMP Table – Please fill out accordingly

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)

RESOLUTION NO. B-2216


BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS, AS FOLLOWS:

SECTION 1: The 2016 Stormwater Management Program shall become the official guiding authority for actions by the Leavenworth City Commission and its staff until or unless changed by official action.

SECTION 2: The 2016 Stormwater Management Program was reviewed by the Governing Body at the February 19, 2019 Study Session with no changes recommended.

PASSED AND APPROVED This 26th Day of February 2019.




Jermaine Wilson, Mayor

ATTEST:


Carla K. Williamson, CMC, City Clerk

City of Leavenworth Stormwater Management Program

Adopted by the City Commission February 23, 2016

City of Leavenworth Stormwater Management Program

February 2016

Program History

The City of Leavenworth was established in the 1850's along Three-Mile Creek and on the banks of the Missouri River. Since that time the City has grown to include most of the Three-Mile Creek and Five-Mile Creek watersheds.

There has been a history of flooding since the founding of the city, with notable examples in the attached Appendix. The most recent dramatic example was in October 2005 where an estimated eleven inches of rain fell in a four hour period, causing significant property damage throughout the community. On July 6, 2015 over three inches fell in a one hour period also causing significant damage.

It is understandable that the city focused efforts since at least the 1980's to improve stream capacity to reduce flooding. Key improvements include:

- Replaced Major Bridges (at least 8)
- Channel Improvements on Three-Mile Creek between Missouri River and Broadway
- Stormwater Master Plan (1997)
- FEMA Floodplain Revisions on Three-Mile Creek (2014 and 2015)
- Approved Sales Tax with dedicated stormwater funding (1995, 2005, 2015)

During the late 1980's the Environmental Protection Agency (EPA) determined that stormwater discharges from urban areas were having a negative impact on the nation's waterways. In the 1990s Congress expanded Clean Water Act authority to regulate municipal stormwater discharges under the National Pollutant Discharge Elimination System (NPDES). Phase I regulations were implemented in 1990 for large municipalities and Phase II regulations were implemented in 1999 for smaller municipalities such as Leavenworth

The City of Leavenworth received its first NPDES stormwater permit from the Kansas Department of Health and Environment (KDHE) in 2004, along with 58 other regulated entities. All regulated Phase II entities have the same six minimum requirements:

1. Public outreach and education
2. Public involvement
3. Municipal pollution prevention
4. Construction site stormwater control
5. Illicit discharge detection and elimination
6. Post construction stormwater control.

Stormwater Management Program
City of Leavenworth
February 17, 2016

A new NPDES permit was issued to City of Leavenworth in 2014 which includes the same six minimum control measures, along with additional requirements for water quality testing and an updating of the Stormwater Management Program

Stormwater Program Goals

The stormwater program of the city has two goals:

- Protect people and property from flood events
- Protect and enhance water quality

The city works to meet these goals by having a qualified staff and appropriate standards for design and construction of improvements.

Staff

The Public Works Department staff includes engineers, inspectors, technicians, GIS mappers and project managers that review plans for all projects. The Community Development Department reviews plans for compliance with zoning ordinances

The Street Division has significant staffing and equipment resources to assist in addressing stormwater matters that may occur, and there are two full-time stormwater employees who inspect, evaluate, clean and perform small repairs on existing stormwater infrastructure. The Community Development Department has two full-time inspectors to evaluate zoning matters within the city including stormwater concerns. Employees of Water Pollution Control (wastewater) perform the measuring and testing work required.

Program Tools

The City uses a variety of tools to assist in the evaluation and management of stormwater issues including:

1. Stormwater Master Plan (1997) by Black & Veatch)
2. Stormwater Design Guidelines (March 2015)
3. American Public Works Association Section 5600 as a guideline (2011)
4. MARC/APWA BMP Manual as a Guideline (2012)
5. Floodplain Management (20103CV000B, July 2015)
6. Requiring a "Land Disturbance Permit" for most construction activity (March 2015)
7. Various City Ordinances
8. Submit Annual Report to KDHE after review by City Commission

Stormwater Management Program
City of Leavenworth
February 17, 2016

Stormwater Management Program Implementation

City Staff has created goals related to the six minimum control measures in an effort to meet the needs of the community and comply with the NPDES requirements. These are shown in the attached pages.

Please do not hesitate to contact the Office of the City Engineer should you have any questions regarding this program

Michael G. McDonald
City Engineer
Public Works Director
City Hall
100 N Fifth Street
Leavenworth, KS
mmcdonald@firstcity.org
913-684-0375

Attachments

- FEMA Narrative on Flood events from FIS 20103CV000B
- Stormwater Management Program Goals

**Stormwater Management Program BMP List
February 23, 2016**

Minimum Control Measure #1 - Public Education and Outreach

BMP	Measure	Responsibility	Schedule (Permit Year)
Web Page link to stormwater infrastructure information – Master Plan, Management Plan, Map	# of visitors	Leavenworth	1,2,3,4,5
Place documents in Public Library stormwater infrastructure information – Master Plan, Management Plan, Map	# Check-out requests	Leavenworth	1,2,3,4,5
Include articles or stories related to stormwater in city newsletter in at least two issues per year	# Articles/Stories # Issues	Leavenworth	1,2,3,4,5
City generated posts on social media related to stormwater issues at least ten occurrences per year	# Posts	Leavenworth	1,2,3,4,5
Provide information to Citizens regarding the City of Leavenworth Solid Waste Division.	Distribute trash bags to citizens with proper disposal handout	Leavenworth	1,2,3,4,5
Show Stormwater information on Local cable TV Station	Broadcast community forums, in which continued water quality discussions take place	Leavenworth	1,2,3,4,5

**Stormwater Management Program BMP List
February 23, 2016**

Minimum Control Measure #2 - Public Participation and Involvement

BMP	Measure	Responsibility	Schedule (Permit Year)
Hold Public Information Meetings Regarding Stormwater Issues	Annual review by City Commission of Stormwater Annual Report Review of Stormwater projects in annual Capital Improvement Plan	Leavenworth	1,2,3,4,5
Create an "Adopt a Stream Program"	# Streams Adopted # Streams Cleaned	Leavenworth	1,2,3,4,5
Improve Lines of Communication with the Public through use of website and social media	Integrate contemporary methods of providing and receiving information to the Public.	Leavenworth	1,2,3,4,5
Annual City-Wide Clean-up Program	# Groups # Participants	Leavenworth	1,2,3,4,5
Customer Surveys – conduct at least one survey each year on stormwater related issues in an on-line environment	# of responses	Leavenworth	1,2,3,4,5
Encourage groups to participate in activities such as inlet stencil program and similar	# groups # programs	Leavenworth	1,2,3,4,5

**Stormwater Management Program BMP List
February 23, 2016**

Minimum Control Measure #3 - Illicit Discharge Detection and Elimination (IDDE)

BMP	Measure	Responsibility	Schedule (Permit Year)
Inspect complaints of Illicit Discharge	Inform public of methods to communicate concerns regarding illicit discharges # reports investigated	Leavenworth	1, 2, 3,4, 5
Update Stormwater Outfall Maps	Continue efforts to accurately locate and measure existing and new stormwater infrastructure	Leavenworth	1,2,3,4,5
Inspect Outfalls	# outfalls inspected	Leavenworth	1,2,3,4,5
Collect Yard Waste at City Composting Facility	# customers	Leavenworth	1,2,3,4,5
Collect Tree and Brush Debris at Brush disposal site	# customers	Leavenworth	1,2,3,4,5
Collect Household Hazardous Waste as part of Citywide Clean-up Event	# pounds of household hazardous waste recycled	Leavenworth	1, 2, 3,4, 5
Conduct Free Disposal Saturdays (First Saturday)	# Events # Tons Collected	Leavenworth	1,2,3,4,5
Staff Training	# of staff trained	Leavenworth	1,2,3,4,5

**Stormwater Management Program BMP List
February 23, 2016**

Stormsewer Maintenance and Inspection	Provide dry weather storm sewer inspection.	Leavenworth	1,2,3,4,5
Inspection of Sanitary Sewer Systems	Inspect residential and commercial sanitary systems for improper discharge into storm drains. Inspect sanitary sewer system to reduce number and volume associated with SSO Coordinate SSO events between Wastewater Staff, Building Officials and Engineering.	Leavenworth	1,2,3,4,5
Commercial Grease Trap Inspection Program	Review status of commercial grease traps through record review and physical inspection	Leavenworth	1,2,3,4,5

**Stormwater Management Program BMP List
February 23, 2018**

Minimum Control Measure #4 - Construction Site Runoff Control

BMP	Measure	Responsibility	Schedule (Permit Year)
Construction Drawing plan review and Site Runoff Control	# plans reviewed # LDP Issued	Leavenworth	1, 2, 3,4,5
Publish Updated Standard Details and Design Criteria for Erosion Control*	Make available on-line Review annually with staff	Leavenworth	1,2,3,4,5
Staff Training on Runoff Inspection	# inspectors trained	Leavenworth	1,2,3,4,5
Inform Local Contractors of LDP	Annual notification of LDP requirements LDP documents available on-line	Leavenworth	1,2,3,4,5
Pre-Construction Meetings with Owner and Contractor - Require meetings with owner and contractor prior to commencement of grading operations.	# Meetings	Leavenworth	1,2,3,4,5
Construction Site Inspection and Enforcement - Increase the frequency of inspections and communications back to owner/contractor	Documentation of inspections	Leavenworth	1,2,3,4,5

Stormwater Management Program BMP List
February 23, 2016

Minimum Control Measure #5 - Post Construction Runoff Control

BMP	Measure	Responsibility	Schedule (Permit Year)
Construct Sediment vane traps on new and reconstructed inlets	# Inlets	Leavenworth	1,2,3,4,5
Protect sensitive areas, such as wetlands and riparian areas through plan review and selected land acquisition from developers and at tax sales	# tracts acquired from developers # tracts acquired from Tax sale # Acres acquired/year	Leavenworth	1,2,3,4,5
Enforce Post Construction Runoff Control Ordinance	# LDP Releases Documentation of inspection and communication	Leavenworth	1,2,3,4,5
Conduct Long Term BMP Maintenance Inspections	Documentation of inspection and communication	Leavenworth	1,2,3,4,5
Analyze Existing Structural BMP Performances at selected sites (particularly detention basins)	# sites evaluated	Leavenworth	1,2,3,4,5
Measure rain gage and creek depth to evaluate flow quantity and duration from at least March - October.	# Rain gages # Stream gages	Leavenworth	1,2,3,4,5

**Stormwater Management Program BMP List
February 23, 2016**

Minimum Control Measure #6 - Municipal Pollution Prevention

BMP	Measure	Responsibility	Schedule (Permit Year)
Review City Facilities for water quality concerns and develop plans to address them, goal is at least three facilities per year	# Reports Prepared	Leavenworth	1,2,3,4,5
Street Sweeping Program – goal is residential areas three times per year and collector/arterial streets once per month (8 months)	# Times completed Residential Area Sweeping # Times completed Collector/arterial Sweeping # hours sweeping	Leavenworth	1,2,3,4, 5
Snow Removal Operations - Use ground speed control and GPS equipment to keep salt use within guidelines	# tons of salt used per year # pounds per lane mile per storm	Leavenworth	1,2,3,4,5
Stormwater Inlet Cleaning	# Inlets	Leavenworth	1,2,3,4, 5
Continue Citywide Leaf Collection Program (currently one-half of city each year)	# loads	Leavenworth	1,2,3,4,5

FLOOD INSURANCE STUDY



LEAVENWORTH COUNTY, KANSAS AND INCORPORATED AREAS

COMMUNITY
NAME
BASEHOR, CITY OF
EASTON, CITY OF
LANSING, CITY OF
LEAVENWORTH, CITY OF
LEAVENWORTH COUNTY
UNINCORPORATED AREAS
LINWOOD, CITY OF
TONGANOXIE, CITY OF

COMMUNITY
NUMBER
200187
200188
200189
200190
200193

200191
200192



REVISED: July 16, 2016



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER

20103CV000B

September 1970. Unfortunately, precise data regarding flood levels reached by these events have not been documented. The following extracts from the Leavenworth Times described two of the events that were experienced. "On July 30, 1958, more than four and half inches of rain fell in the area." Hundreds of area residents were delayed in reaching their homes by streams that were overflowing their banks at many locations. On October 13, 1961, three to four inches of rainfall occurred in the area.

The City of Lansing is above the floodplain of the Missouri River except for the areas where Sevenmile Creek and other right bank tributaries enter the Missouri River. The only recorded damage to the City, caused by flooding from the Missouri River, occurred when an emergency levee failed during the April 1952 flood. The flood caused a total of \$125,200 damage to the Leavenworth and Lansing areas. The damages were \$112,000 to business property, \$12,600 to homes, and \$600 to public property (Reference 1). The main sewers are subject to silting and other damage by flooding from the Missouri River.

City of Leavenworth

The flood producing characteristics of Threemile, South Branch, and Fivemile Creeks are typical of small watersheds in the Midwest region. Past flood flows have usually been caused by short duration thunderstorms having high intensity rainfall. Conversely, flood problems associated with the Missouri River are usually caused by long protracted fronts occurring over large areas. There are no natural obstructions to flood flow in the Threemile Creek floodplain. Obstructions restricting floodwater flow have been created by man's continued encroachment on the Threemile Creek floodplain. Severe restrictions to flood flow have been created in the past by construction of many bridges located in the floodplain between Tenth Street and the mouth. In addition, a portion of the creek channel had been enclosed in a box culvert located under the railroad yards between Seventh Street and Broadway. Because of inadequate openings in these bridges and culvert, a cumulative aggravation of flood backwater occurred in the lower floodplain

The City of Leavenworth embarked on a substantial effort to improve flooding conditions downstream of Tenth Street in the early 1980's. The bridge on Tenth Street was replaced in 1983, the bridge on Cherokee (west of Broadway) in 1981, and the bridge on Shawnee west of Tenth in 1985. The rail yard trestles were removed by 1988. In addition, new bridges have been constructed at Third Street, Sixth Street, Seventh Street, Broadway and Shawnee Streets since 1988. Construction of a pedestrian trail at creek level between Esplanade Street and 7th Street contributed to larger channel cross sections between Fourth Street and Seventh Street and generally improved flow characteristics. A new bridge at Second Street is expected to be constructed in 2015. A significantly larger natural open channel was constructed between 6th Street and Cherokee Streets in the early 1990's.

The improvements since the last FIS have had a significant impact on the critical area near Cherokee and Broadway Streets. At this location flood flows were impeded by small bridge openings at Cherokee Street and at Broadway Street that forced excess water out of banks through the developed floodplain area along Cherokee Street. Flow from this area attempting to return to the channel was further impeded by the now removed railroad yard culvert. Flooding at Cherokee Street occurs less often with the construction of the noted improvements.

Channel restrictions between Cherokee Street and Shawnee Street west of Broadway remain. These restrictions continue to pose a threat to structures along Miami St. between 8th St. and 10th St.

Since there is no stream gaging stations on Threemile Creek or its South Branch, documentation of flood problems affecting Leavenworth in the past rely completely upon historical accounts. Detailed investigations have been made of flooding which occurred in July 1958 and October 1961. In addition, fragmentary records of 11 additional floods have been found through a search of newspaper files. It appears that the maximum known flood prior to 1972 occurred in 1904. This flood had an estimated peak discharge of 7,000 cubic feet per second (cfs) at the mouth (between the discharge of a 50-year and 100-year flood), and 6,500 cfs at Seventh Street. The following composite accounts describe the July 1958 and October 1961 events experienced on Threemile Creek.

On July 30, 1958, more than 4 1/2 inches of rain fell in the Leavenworth area. Damage estimated at \$30,000 was reported from businessmen and homeowners from the resulting flood on Threemile Creek. The downtown area was hardest hit, especially on Cherokee from Broadway to Seventh Street where the discharge of the flood was estimated at 4,300 cfs.

On October 13, 1961, three to four inches of rainfall fell in the Leavenworth area. The resulting flood on Threemile Creek exceeded bank full capacity at 7:00 PM, crested at about 9:00 PM, and receded to within-bank stages at 11:30 PM. The flood caused \$71,000 damage in Leavenworth, of which \$58,700 was damage to 24 business places and 16 residences, and the remainder was damage to transportation facilities and municipal property. The discharge at Seventh Street was estimated at 4,000 cfs.

The City of Leavenworth Public Works Department has identified the following significant flood events since 1972 (Reference 12). In all cases – water overtopped the banks upstream of Cherokee Street and flowed east along Cherokee Street, returning to the banks of the creek at 6th Street. Flooding of the 800 and 900 blocks of Miami also occurred in the same years noted below causing damage to residences and businesses. Water has been as high as two feet deep in Miami Street. The city has purchased several homes using “buy-out” programs, and worked with businesses to ensure that they take appropriate measures to minimize risks from flooding. Some of the more notable events include:

- July 6-7, 1986- 10.4 inches of rain fell, causing water to flow down Cherokee Street and floating several automobiles and trailers.
- May 15, 1990 – 4.4 inches of rain fell causing minor flooding.
- October 4th 1998 – between six and eight inches of rain fell in a twelve hour period causing damage on Cherokee Street and areas upstream of Shawnee (west of Tenth Street). Damage was also noted in the 800 and 900 blocks of Miami Street.
- 1993 – Local heavy thunderstorms combined with an elevated water surface in Three-Mile Creek from record flooding on the Missouri River resulted in significant flooding along Cherokee Street.

- **October 2nd 2005** – A NWS gage recorded 5.6 inches of rain, but eyewitness accounts and anecdotal evidence supports between seven and eleven inches of rain falling in a four hour period in some locations. The resulting flood was identified as the worst in memory, and flooded structures between 11th Street and downstream to 6th Street. A new bridge was under construction at 6th Street, and the debris caused the complete collapse of the falsework. The floodwater and debris and falsework passed through the old railroad Bridge at Esplanade Street which acted as lens and focused the stream upon the mouth of the creek at the Missouri River. The jet of water undermined the sanitary sewer along the banks of the Missouri River. A hole that later measured as over forty feet deep appeared where the sewer had been buried twenty feet below the creek bottom. The sewers were repaired by late 2006 at a total cost of about \$1,000,000. Estimates of flow were later determined by Black & Veatch Engineers as being in excess of 7500 cfs at Esplanade Street.
- There has been no further flooding of Cherokee Streets between 2005 and October 2014.

Flood damage along South Branch of Three-Mile Creek has typically been much less severe than that along the Main Branch of Threemile Creek. Damage to road crossings and property near Eleventh Street as well as scouring is likely to take place during floods.

Severe restrictions from bridges across Five-Mile Creek have been addressed with new structures at Fourth Street, Second Avenue/Limit Street and Shrine Park Road since 1972. Inadequate openings of the older bridges had caused a cumulative aggravation by flood backwater in the floodplain.

Newspaper accounts provide most of the history of flooding on Fivemile Creek prior to the 1970's. These accounts reveal that flooding has occurred several times in the past. Notable floods were reported in June 1942, July 1958, October 1961, April 1969, and September 1970. Unfortunately, precise data regarding flood levels reached by these floods have not been documented.

The flood of July 30, 1958, had Fivemile Creek flooding Shrine Park Road, Limit Street and U.S. 73 at Black Bridge (Reference 1).

The flood of October 12, 1961, swept away cut brush laying in the vicinity of the sewage treatment plant at Second and Fivemile Creek (Reference 1).

On April 26, 1969, Fivemile Creek ran 10-12 inches deep across Shrine Park Road, just south of the entrance to the golf club. Along south Fourth Street the stream spread out for a half mile or more and at Second Street, in the vicinity of the sewage disposal plant, the creek rose to the edge of the street (Reference 1).

Heavy rains since 1988 often result in water flowing across Shrine Park Road at low areas north of the new bridge and across Tenth Avenue at Wellington Drive. These events also result in significant erosion and scouring of the creek bank. Water has crossed the bridge at Second Avenue and Limit Street on several occasions at depths up to six inches since 1988. One notable event occurred on October 4, 1998, when 4.74 inches of rain fell in two hours (measured in south Leavenworth), and it resulted in ten

inches of water across Tenth Avenue at Wellington, 24 to 30 inches across Shrine Park Road north of the bridge, and six to eight inches across Limit Street (Reference 12). A new larger bridge at this site is completed (2014) and is expected to reduce and possibly eliminate roadway flooding at this location.

The City of Leavenworth is above the floodplain of the Missouri River except for the areas where Threemile and Fivemile Creeks and other smaller right bank tributaries enter the Missouri River. Recorded damage to the city, caused by flooding from the Missouri River, occurred when an emergency levee failed during the April 1952 flood. The flood caused a total of \$125,200 damage in Leavenworth. The damages were \$12,000 to business property, \$12,600 to homes, and \$600 to public property. The Wastewater Treatment Plant had never been threatened by flooding until it was inundated in the 1993 Missouri River Flooding, with repair costs in excess of \$1 million required to restore service. The plant has been threatened to a level requiring sandbagging and other measures at least three additional times since 1993, most notably in 2011 due to releases from Corps of Engineers dams upstream when the levels were within six inches of the city closing the plant.

Second Street north of Five-Mile Creek is subject to standing water and flooding from high water in the Missouri River and is then closed to protect the public. This has happened at least five times since 1988.

The Riverfront Community Center (Union Railroad Depot) was protected from flooding in 1993 when nearly four feet of water from the Missouri River threatened the structure. Heroic efforts by the community created a sizable protective sandbag wall that prevented flooding, but the building suffered related damage requiring over \$300,000 in repairs. It has been necessary to construct flood protective measures at least three times since 1993 with expenses typically in excess of \$10,000 on each occasion. The City expects to construct a permanent floodwall with a FEMA grant in 2015 to reduce expenses and damage from future floods.

A combined effort of Leavenworth County, City of Leavenworth and City of Lansing resulted in a recording stream gage being installed at the Leavenworth Waterworks Intake structure on Dakota Street in September 2012. This is expected to improve flood evaluation and forecast activities.

2.4 Flood Protection Measures

There are several flood protection measures operable for the benefit of Leavenworth County. The Mud Creek Levee Unit meets the requirements and provisions of Section 65.10 of the NFIP regulations. The levee system provides flood protection for the 1-percent annual chance flood event on Mud Creek. The levee system is currently in the USACE PL 84-99 levee program and is periodically inspected by the Kansas City USACE District. There are some low frequency private agricultural levees along Stranger Creek that do not meet the FEMA 3-foot freeboard requirement and any other provisions of Section 65.10 of the NFIP regulations. There are no major structural flood protection measures planned for this study area. However, the adoption of State and local development regulations concerning floodplain management will help alleviate storm related losses.

Section E

Stormwater Management Program Requirements

Sections E1 – E7

Note: City is Phase 2 – E7 requirements do not apply

E. Stormwater Management Program Requirements (Six Minimum Control Measures)

1. Public Education and Outreach (Table) - Please fill out accordingly

List all of the public education and outreach BMPs as identified in the SMP and provide the requested information in the following table. (List presentations and media)

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)
1.1	Webpage link to stormwater infrastructure information – Master Plan, Management Plan, Map	# Of visitors – Current software unable to isolate detailed information; however, entire site had 128,004 views in 2018	All items are available on-line. Current web page software does not provide detailed page views counts.
1.2	Place documents in public library stormwater infrastructure information – Master Plan, Management Plan, Map	# Check-out requests – Unknown	All items available at the public library. No check-out requests are known.
1.3	Include articles or stories related to stormwater in City newsletter in at least two issues per year	# Articles/Stories – at least ten stories for the three issues in 2018 (Goal was minimum of nine stories) # Issues – three issues of City Connection delivered in 2018	Coordination between Public Information Office and Public Works has stories on leaf collection, wastewater issues, adopt a park, etc.
1.4	City-generated posts on social media related to stormwater issues at least ten occurrences per year	# Posts – unable to determine exact number, well in excess of fifty.	Public Information Office interacts with the public on social media on wide range of stormwater-related issues.
1.5	Provide Information to citizens regarding the City of Leavenworth Solid Waste Division.	Distribute trash bags to citizens with proper disposal handout.	The City continues to provide citizens with information via the City website, handouts, and a recycling coach app. A paper insert with solid waste and other City information is provided to the doorstep of nearly all residences twice per year in roll of trash bags.
1.6	Show stormwater information on local cable TV station	Broadcast community forums, in which continued water quality discussions take place. There were six City Commission meetings (study sessions and regular meetings) during the course of the year that specifically discussed stormwater.	Public Information Office broadcasts City Commission Meetings, Planning Commission Meetings and others on City channel cable TV – began live broadcast online in 2017.

E. Stormwater Management Program Requirements (Six Minimum Control Measures) (CONTINUED)

2. Public Involvement and Participation (Table) – Please fill out accordingly

List all of the public involvement and participation BMPs as identified in the SMP and provide the requested information in the following table. (List all associations & partnerships)

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)
2.1	Hold public information meetings regarding stormwater issues	Annual review by City Commission of Stormwater Annual Report – YES Review of stormwater projects in annual Capital Improvement Plan - YES	City Commission reviewed KDHE annual stormwater report February 19th, 2018; they were also on live TV. City Commission reviewed stormwater projects for CIP in 2018 and approved design and construction of several projects. A lengthy and complex discussion of projects took place over several meetings during the approval process for the stormwater fee.
2.2	Create an “Adopt a Stream Program”	# Streams adopted - None # Streams cleaned – None	There were no known focused creek cleanup groups in 2018
2.3	Improve lines of communication with the public through use of website and social media	Integrate contemporary methods of providing and receiving information to the public. - ONGOING	Public Information Office continues a robust social media program for all City issues. Posted Information on other efforts such as detention ponds and such improves as staff skills increase.
2.4	Annual Citywide clean-up program	# Groups – 41 # Participants – 920	Citywide clean up continues to occur. The Annual Spring Clean-up Program on April 7, 2018 had a slightly lower turnout of 920 volunteers due to the cold weather. This is a decrease of number in 2017 where there were 1,056 volunteers.
2.5	Customer surveys – conduct at least one survey each year on stormwater related issues in an on-line environment	# of responses – N/A	No survey was conducted in 2018.
2.6	Encourage groups to participate in activities such as inlet stencil program and similar	# Groups – None # Programs – None	Group participation is encouraged for environmental issues. There were no participants in 2018.

E. SMP Requirements (Six Minimum Control Measures) (Continued)

3. Illicit Discharge Detection and Elimination

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a map of the MS4 been developed, showing the location of all outfalls, either pipes or open channel drainage, showing names and location of all streams or lakes receiving discharges from the outfalls?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The permit may require the permittee enact ordinances, or resolutions. Have ordinances, or resolutions, or regulations to prohibit non-stormwater discharges into the storm sewer system been enacted? Effective date:
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Have the ordinances, resolutions, or regulations been modified? Effective date:

List all the Illicit Discharge Detection and Elimination BMPs as identified in the SMP and provide the requested information in the following table.

This section
intentionally
left blank

3. Illicit Discharge Detection and Elimination (Table) – Please fill out accordingly

List all of the illicit discharge detection and elimination BMPs as identified in the SMP and provide the requested information in the following table.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)
3.1	Inspect complaints of illicit discharge	Inform public of methods to communicate concerns regarding illicit discharges - YES # Reports investigated – 46 total calls on sewer/storm sewer issues and approximately 20 more from all other sources.	Public Information Officer has created social media space for complaints. 24/7 “real person” phone answering service can dispatch City forces for emergencies.
3.2	Update stormwater outfall maps	Continue efforts to accurately locate and measure existing and new stormwater infrastructure	City maps are updated constantly. The GIS staff and the stormwater crew assist in obtaining accurate measurements and locations. In 2016 the maps were made available online to the public.
3.3	Inspect outfalls	# Outfalls inspected –over 685 inlets and drains were inspected. No specific notation on “outfall”	On-going efforts by the stormwater crew has inspected infrastructure throughout the year as part of their routine work and for the GIS staff.
3.4	Collect yard waste at City composting facility	# Customers: for 2018, Grass – 386, Leaves - 713	City provides free drop off of yard waste for composting. There may be slight overlap with #3.5
3.5	Collect tree and brush debris at brush disposal site	# Customers – 3,562 for 2018. (1,063 on free Saturdays, 2,499 on other days).	City provides a KDHE approved site for drop off of tree and brush debris for disposal through a combination of mulching, composting and burning.
3.6	Collect household hazardous waste (HHW) as part of Citywide clean-up event	# Pounds of household hazardous waste recycled – approximately 2,907 lbs.	City residents are directed to Leavenworth County facility during most of the year. Citywide clean up accepts HHW, but it is not weighed separately.
3.7	Conduct free disposal Saturdays (First Saturday)	# Events - 12 # Tons collected – 225.30	The free Saturdays are well attended; however, volume is not tracked separately for regular refuse and recycling material.
3.8	Staff training	# of staff trained – 5 staff attended 46 training opportunities	At least 46 days of training on stormwater-related issues; many on multiple issues.
3.9	Storm sewer maintenance and inspection	Provide dry weather storm sewer inspection. - YES	Two-person crew inspects stormwater structures and works with GIS staff.

3.10	Inspection of sanitary sewer systems	<p>Inspect residential and commercial sanitary systems for improper discharge into storm drains. - YES</p> <p>Inspect sanitary sewer system to reduce number and volume associated with SSO - YES</p> <p>Coordinate SSO events between wastewater staff, building officials and engineering. -YES</p>	<p>City operates CCTV of sewer and storm sewer systems throughout the year. Approximately 65.2 total miles of sanitary sewer lines were cleaned in 2018. City inspected 8.4 miles of sanitary sewer and 1.2 miles of storm sewers with CCTV.</p> <p>City completed \$530,734 in work within the sanitary sewer system to reduce Inflow and Infiltration to and from the storm sewer system.</p> <p>Greatly improved coordination between wastewater staff and building inspection staff on review and resolution of SSO events.</p>
3.11	Commercial grease trap inspection program	Review status of commercial grease traps through record review and physical inspection – YES.	An aggressive grease trap inspection program has improved participation and record keeping from the approximately 54 entities required to have a grease trap. At least two new installations were completed in 2018 as a result of this program.

C. SMP Requirements (Six Minimum Control Measures) (Continued)

4. Construction Site Stormwater Runoff Control

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development/redevelopment projects been enacted? Effective date: 12/23/16
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure or program been developed requiring construction site owners and/or operators to control waste such as discarded building materials, concrete truck washout, chemicals, paint, litter, and sanitary waste at construction sites likely to cause adverse impacts to water quality?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed and implemented requiring site plan review which includes consideration of potential water quality impacts?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed for the receipt and consideration of information submitted by the public?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed and implemented for construction site inspection and enforcement of the control measures?

List all the construction site stormwater runoff control BMPs as identified in the SMP and provide the requested information in the following.

E. Stormwater Management Program Requirements (Six Minimum Control Measures)

4. Construction Site Stormwater Runoff Control (Table) - Please fill out accordingly

List all of the Site Stormwater Runoff Control BMPs as identified in the SMP and provide the requested information in the following table.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)
4.1	Construction drawing plan review and site runoff control	# Plans reviewed – 51 (13 were construction and 38 were development) # LDPs issued - 80	All development projects were reviewed related to installation of appropriate BMPs. All construction projects were reviewed to ensure adequate BMPs were included in the work to prevent erosion runoff.
4.2	Publish updated standard details and design criteria for erosion control	Make available on-line - YES Review annually with staff – No formal meeting; however, staff has met informally throughout the year.	Discussed with the Development Review Committee (DRC) and with the designers.
4.3	Staff training on runoff inspection	# Inspectors trained – Staff; see section 3.8	City staff has attended a variety of courses in 2018. City staff shares new information as encountered.
4.4	Inform local contractors of LDP	Annual notification of LDP requirements - YES LDP documents available online - YES	Contractor’s LDPs are regularly inspected and contractors are informed of any deficiencies. LDP documents are available online.
4.5	Pre-construction meetings with owner and contractor - require meetings with owner and contractor prior to commencement of grading operations.	# Meetings – 9	All City-funded projects have a pre-construction conference. Development projects typically meet at the Development Review Committee where BMP requirements are discussed and then incorporated into the plans. City has no requirement that private development have a pre-con with the City.
4.6	Construction site inspection and enforcement - Increase the frequency of inspections and communications back to owner/contractor	Documentation of inspections – YES 330 total inspections were conducted in 2018; including detention basin inspections.	Extensive documentation of site visits (both random and after rainfall) are included in each project file. This includes City and development projects, and individual LDP inspections (such as home construction).

E. SMP Requirements (Six Minimum Control Measures) (Continued)

5. Post-Construction Site Stormwater Management in New Development and Redevelopment

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development and redevelopment projects been enacted? Effective date: 12/23/16
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a post-construction stormwater runoff program been implemented?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have post-construction sites been inspected?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are BMPs specified to minimize adverse water quality impacts?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have strategies been developed to include a combination of structural and/or non-structural BMP appropriate for the municipality?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have measures been implemented to ensure adequate long-term operation and maintenance of structural BMPs?

List all the post-construction site stormwater management in new development and redevelopment BMPs as identified in the SMP and provide the requested information in the following table.

This section
intentionally
left blank

E. Stormwater Management Program Requirements (Six Minimum Control Measures)

5. Post-Construction Site Stormwater Runoff Control (Table) – Please fill out accordingly

List all of the post-construction site stormwater runoff BMPs as identified in the SMPs and provide the requested information in the following table.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)
5.1	Construct sediment vane traps on new and reconstructed inlets	# Inlets - 50	Sediment traps were installed on new and replacement inlets on various projects.
5.2	Protect sensitive areas, such as wetlands and riparian areas through plan review and selected land acquisition from developers and at tax sales	# Tracts acquired from developers - 0 # Tracts from tax sale - 0 # Acres acquired/year – 0	
5.3	Enforce post construction runoff control ordinance	#LDP releases – 85 Documentation of inspection and communication – YES	LDPs are closed out when the danger of off-site erosion has been eliminated through either vegetation or other means. This is documented in the various permits. Several LDPs from 2016 and 2017 are still open into 2018.
5.4	Conduct long-term BMP maintenance inspections	Documentation of inspection and communication - YES	City continues outreach to detention basin owners. A meeting was held on March 22, 2018 with nine attendees. This effort will continue and expand. City conducts inspections of selected sites on random, after rainfall, or with depth recording equipment. In 2018, the detention basin owners were given a packet with the meeting’s agenda and a basic overview of detention basin maintenance. The packet also included examples of an emergency spill plan and an inspection form.
5.6	Analyze existing structural BMP performances at selected sites (particularly detention basins)	# Sites evaluated – 8	City installed depth recording devices in at least eight locations in 2018. This is to facilitate evaluation of performance. Selected graphs and charts are shared informally with interested parties via email. (See Appendix C and the Kansas City Urban Stormwater Conference PowerPoint Presentation)
5.7	Measure rain gauge and creek depth to evaluate flow quantity and duration from at least March – October.	# Rain gauges - 4 # Stream gauges - 2	City continues to maintain rain and creek monitors. The City also collaborates with other local governments on an extended rain gauge network. Selected graphs and charts are shared informally with interested parties via email. (See Appendix C and the Kansas City Urban Stormwater Conference PowerPoint Presentation)

E. SMP Requirements (Six Minimum Control Measures) (Continued)

6. Municipal Pollution Prevention/Housekeeping

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The permit requires the permittee to enact a program to address pollution prevention/good housekeeping for Municipal Operations. Has such a program been enacted?

List all the municipal pollution prevention/housekeeping BMPs as identified in the SMP and provide the requested information in the following table.

This section
intentionally
left blank

E. Stormwater Management Program Requirements (Six Minimum Control Measures)

6. Municipal Pollution Prevention / Housekeeping (Table) - Please fill out accordingly

List all of the municipal pollution prevention / housekeeping BMPs as identified in the SMPs and provide the requested information in the following table.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)
6.1	Review City facilities for water quality concerns and develop plans to address them, goal is at least three facilities per year	# Reports prepared: Two reports prepared in 2018. City focused on water quality in parking lot projects.	City designed a project at 6th and Cherokee. Miscellaneous stormwater improvements at Three-Mile Creek and Esplanade.
6.2	Street sweeping program – goal is residential areas three times per year and collector/arterial streets once per month (8 months)	# Times completed residential area sweeping – exceeded annual goals # Times completed collector/arterial sweeping – exceeded annual goals # Hours sweeping – 631 # Miles of streets swept – 2,284 (estimated) # Pounds of debris removed – 333.84 tons	Aggressive street sweeping program operations throughout the year weather permitting. There are two sweepers.
6.3	Snow removal operations - use ground speed control and GPS equipment to keep salt use within guidelines	# Tons of salt used per year - 675 # Pounds per lane mile per storm – 289 lbs/lane-mile average for 2018	Use of ground speed control continues to result in relatively stable application rates of 300-350 lbs/lane-mile for several years.
6.4	Stormwater inlet cleaning	# Inlets – 755	Stormwater crew inspected and/or maintained approximately 755 inlets, areas drains and other stormwater facilities.
6.5	Continue Citywide leaf collection program (currently one-half of City each year)	# Loads – 65 loads (est. 1000cy)	City continues to offer free leaf vacuuming for one-half of the City each year (alternating halves).

E. SMP Requirements (Six Minimum Control Measures) (Continued)

7. PHASE ONE OPERATORS ONLY: Monitoring Industrial and High Risk Runoff

The permit requires the permittee to enact a program to address post-construction site stormwater runoff from new development and redevelopment.

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Has the permittee developed and maintained a list of the municipal industrial facilities contributing to the pollutant loading to the MS4?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Have at least two municipal industrial facilities on the list had inspection and sampling conducted?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If the answer to items 1 and 2 is "No," provide a statement. <hr/> <hr/> <hr/>

F. Recordkeeping and Reporting

Some permittees are required to monitor surface waters if the permit includes TMDL monitoring requirements for Specific Impaired Streams or Lakes to Target within Part II of the permit. Provide a current map of monitoring locations.

<i>Local Site Name</i>	<i>Farwell</i>	<i>Arsenal</i>
<i>Local Site Identifier</i>	<i>C1</i>	<i>C2</i>
<i>Sample Location Description</i>	<i>On the east side of this bridge is a pedestrian walkway where a rope and bucket is lowered to the middle of the river to obtain a sample.</i>	<i>From the bike path on the southeast end of the bridge a path extends down to the bank of the river. A 10-foot long sample pole with bucket at the end is used to reach out past littoral vegetation and obtain a sample.</i>
<i>KDHE EDMR Code if Known</i>	<i>Far2002C5</i>	<i>Arse1001C6</i>
<i>Lat/Long Data Decimal & Degree Format</i>		
<i>Latitude</i>	<i>42.367056°</i>	<i>42358910°</i>
<i>Longitude</i>	<i>-71.218089°</i>	<i>-71161087°</i>

"Insert your picture (map)"

*Please clearly label upstream and downstream sites

Please fill out map and table below accordingly and review the example map and table on the previous page for reference.

*Please clearly label upstream and downstream sites

Local Site Name		
Local Site Identifier		
Sample Location Description		
KDHE EDMR Code if Known		
Lat/Long Data Decimal & Degree Format		
Latitude	°	°
Longitude	°	°

Section F

Record Keeping and Reporting

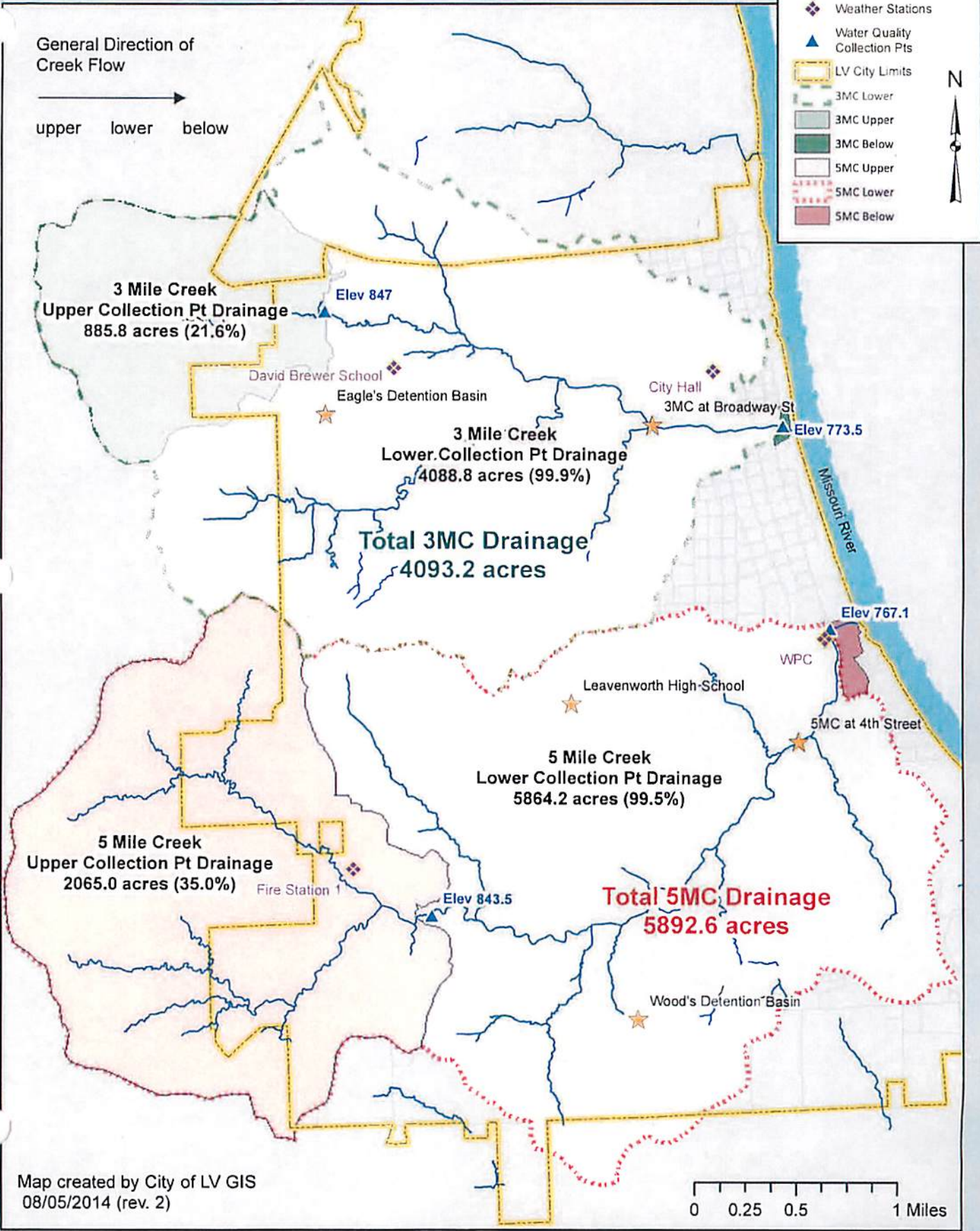
- 2018 Sampling Program

F. Recordkeeping and Reporting

Some permittees are required to monitor surface waters if the permit includes TMDL monitoring requirements for Specific Impaired Streams or Lakes to Target within Part II of the permit. Provide a current map of monitoring locations.

<i>Local Site Name</i>	<i>Farwell</i>	<i>Arsenal</i>
<i>Local Site Identifier</i>	<i>C1</i>	<i>C2</i>
<i>Sample Location Description</i>	<i>On the east side of this bridge is a pedestrian walkway where a rope and bucket is lowered to the middle of the river to obtain a sample.</i>	<i>From the bike path on the southeast end of the bridge a path extends down to the bank of the river. A 10-foot long sample pole with bucket at the end is used to reach out past littoral vegetation and obtain a sample.</i>
<i>KDHE EDMR Code if Known</i>	<i>Far2002C5</i>	<i>Arse1001C6</i>
<i>Lat/Long Data Decimal & Degree Format</i>		
<i>Latitude</i>	<i>42.367056°</i>	<i>42358910°</i>
<i>Longitude</i>	<i>-71.218089°</i>	<i>-71161087°</i>










City of Leavenworth, KS Stormwater Management Data Collection

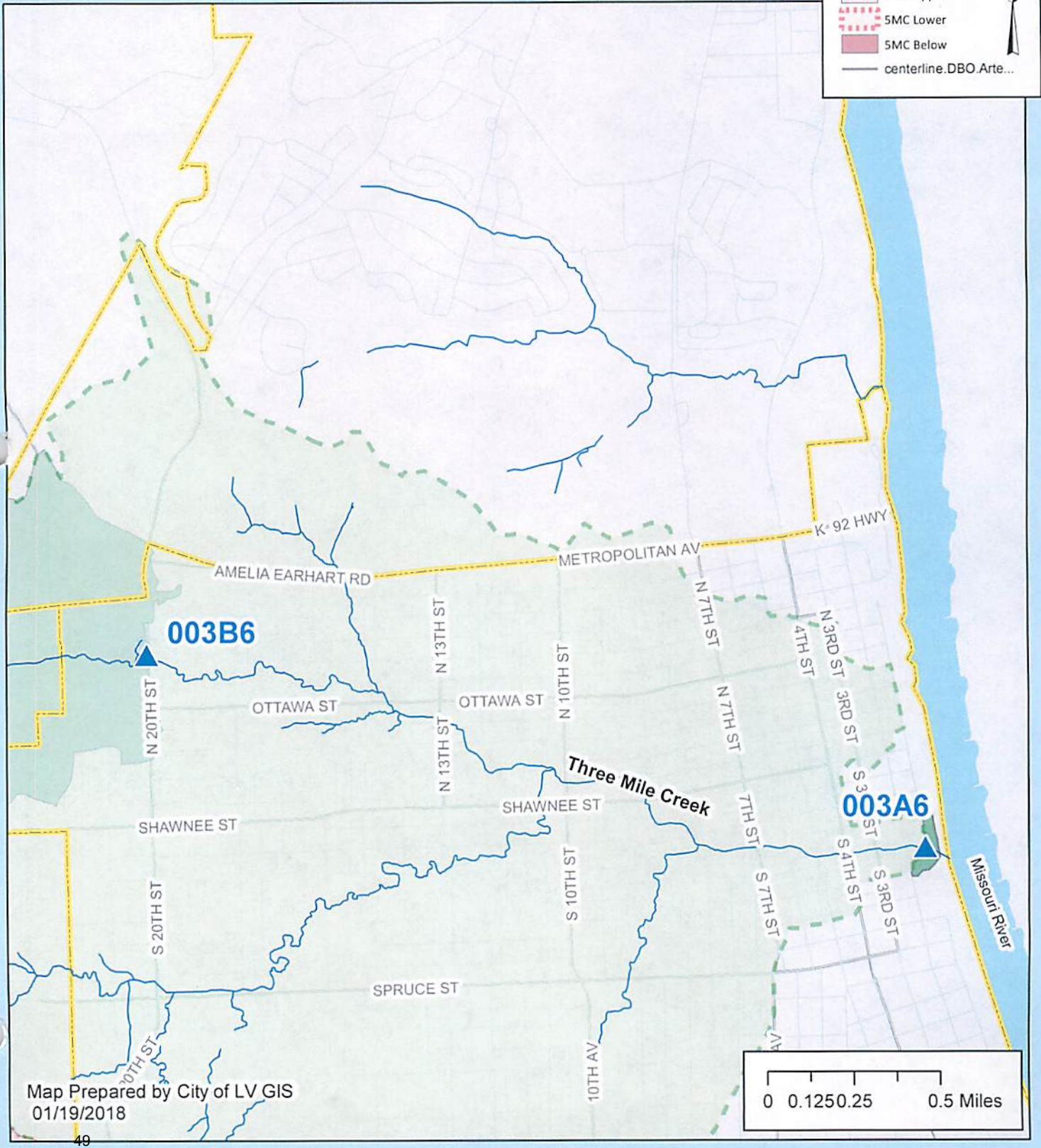


City of Leavenworth, KS

Three Mile Creek Sampling Sites

Legend

-  Water Quality Collection Pts
-  LV City Limits
-  3MC Lower
-  3MC Upper
-  3MC Below
-  5MC Upper
-  5MC Lower
-  5MC Below
-  centerline.DBO Arte...












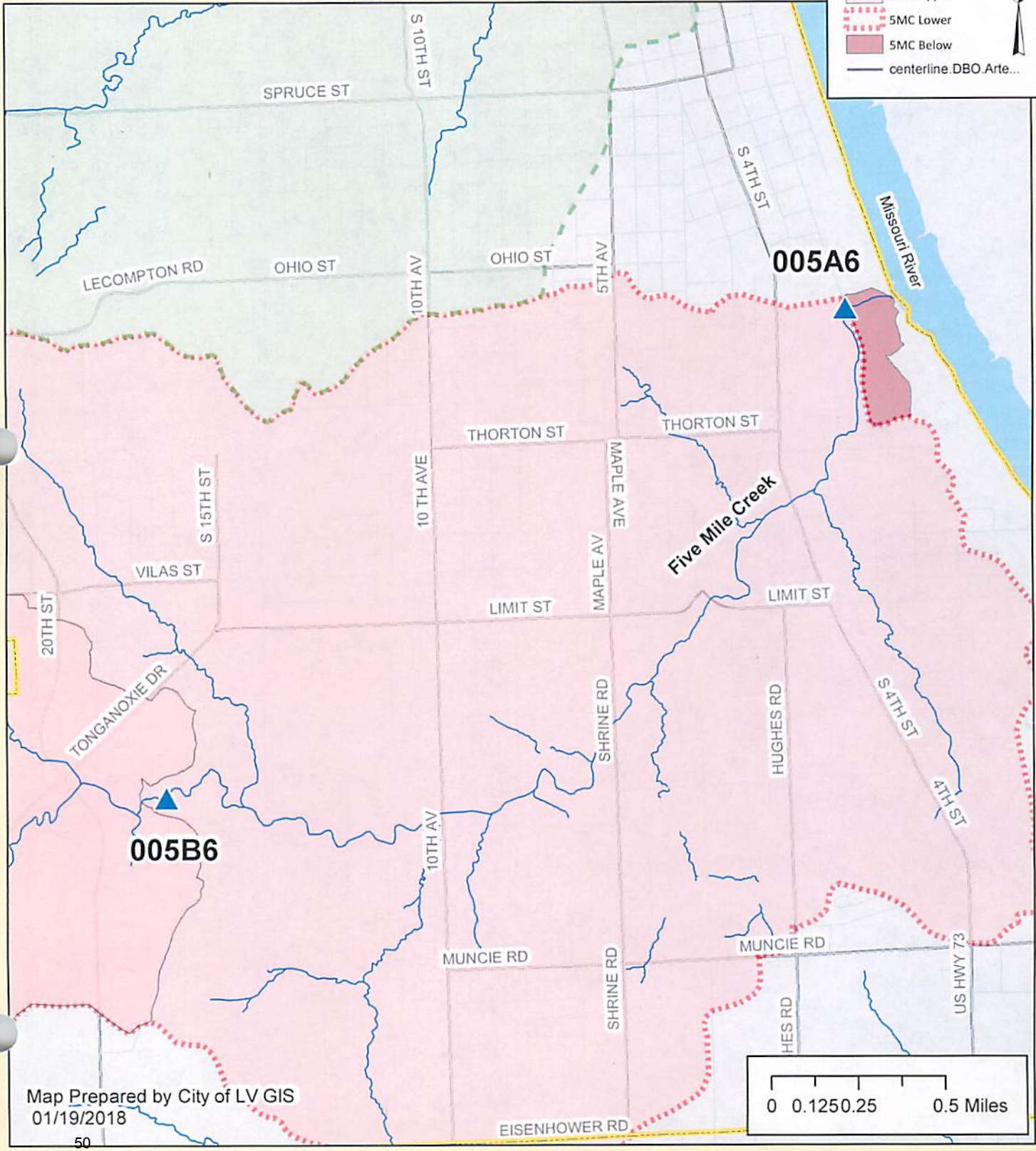
Map Prepared by City of LV GIS
01/19/2018

City of Leavenworth, KS

Five Mile Creek Sampling Sites

Legend

-  Water Quality Collection Pts
-  LV City Limits
-  3MC Lower
-  3MC Upper
-  3MC Below
-  5MC Upper
-  5MC Lower
-  5MC Below
-  centerline.DBO.Arte...



Map Prepared by City of LV GIS
01/19/2018

City of Leavenworth

2018 Stormwater Sampling Summary

■	Water Quality Improvement
■	Reduced or No Change in Water Quality

	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)
Date	March 19 2018		June 2 2018		June 19 2018		August 7 2018		August 19 2018		October 8 2018	
KDHE ID	003B6	003A6	003B6	003A6	003B6	003A6	003B6	003A6	003B6	003A6	003B6	003A6
Time	11:38 AM	11:16 AM	10:07 AM	9:11 AM	2:21 PM	1:59 AM	8:44 AM	8:27 AM	7:35 PM	7:17 PM	9:40 AM	9:14 AM
Three-Mile Creek	CFS											
Total Phosphorus mg/l	0.44	0.33	0.24	0.38	1.1	0.84	0.14	0.17	1.2	1.7	0.56	0.29
Ortho Phosphate mg/l	0.12	ND	0.31	0.55	0.42	0.31	0.12	0.12	0.16	0.36	0.39	0.23
Nitrate+Nitrite mg/l	0.49	0.38	0.74	0.93	1.2	0.9	0.35	0.63	0.89	0.64	1.1	0.72
Total Kjeldahl Nitrogen mg/l	2.3	2.7	1.3	1.9	2	2.5	1.4	1.2	3.3	4.5	1.1	0.74
Total Suspended Solids mg/l	374	480	67.5	287	488	400	23	50.3	897	1760	266	86.8
Turbidity NTU	121	57	77.5	386	675	318	31.5	53.5	1120	1200	265	77.5
E.Coli col/100ml	1340	3590	6970	15650	43520	104620	81600	65700	21420	14500	10710	9080

	Better	Worse
Total Phosphorus	3	3
Ortho Phosphate	4	2
Nitrate+Nitrite	4	2
Total Kjeldahl Nitrogen	2	4
Total Suspended Solids	2	4
Turbidity	3	3
E.Coli	3	3
Total	21	21

	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)
Date	March 19 2018		June 2 2018		June 19 2018		August 7 2018		August 19 2018		October 8 2018	
KDHE ID	005B6	005A6	005B6	005A6	005B6	005A6	005B6	005A6	005B6	005A6	005B6	005A6
Time	11:58 AM	12:17 PM	9:49 AM	9:29 AM	2:40 PM	3:00 PM	9:04 AM	9:23 AM	7:52 PM	8:09 PM	9:57 AM	10:18 AM
Five-Mile Creek	CFS											
Total Phosphorus mg/l	0.14	0.57	0.19	0.38	0.37	0.71	ND	0.15	1.1	0.87	0.48	0.33
Ortho Phosphate mg/l	ND	0.12	ND	0.61	0.18	0.3	ND	1.6	0.28	0.21	0.35	0.25
Nitrate+Nitrite mg/l	0.35	0.41	0.45	2	0.36	0.44	0.27	0.37	0.42	0.5	0.83	0.77
Total Kjeldahl Nitrogen mg/l	0.66	1.9	1	2.7	1.1	2.3	0.53	1.5	3.6	2.2	1.4	1.4
Total Suspended Solids mg/l	156	748	170	578	127	678	37.1	224	1020	1100	138	154
Turbidity NTU	52	119	175	576	109	678	30.9	186	910	775	158	121
E.Coli col/100ml	310	3320	8840	14210	16160	48840	2481	24196	50120	17850	9580	14830

	Better	Worse
Total Phosphorus	2	4
Ortho Phosphate	2	4
Nitrate+Nitrite	1	5
Total Kjeldahl Nitrogen	2	4
Total Suspended Solids	0	6
Turbidity	2	4
E.Coli	1	5
Total	10	32

City of Leavenworth - 2018

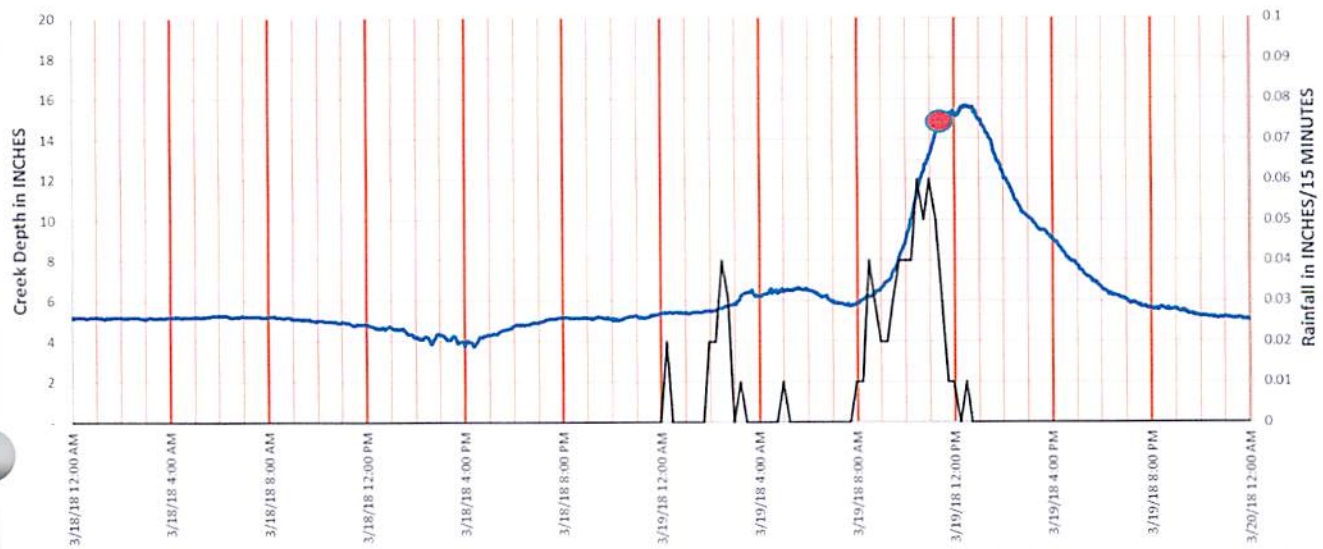
Three Mile Creek - Sampling Time v. Stream Stage and Rainfall

Red Dot ● is approximate Sampling Time

Stream Flow for Three Mile Creek Sample Dates of June 2, 2018 and June 19, 2018 are missing as the data logger was lost or stolen.

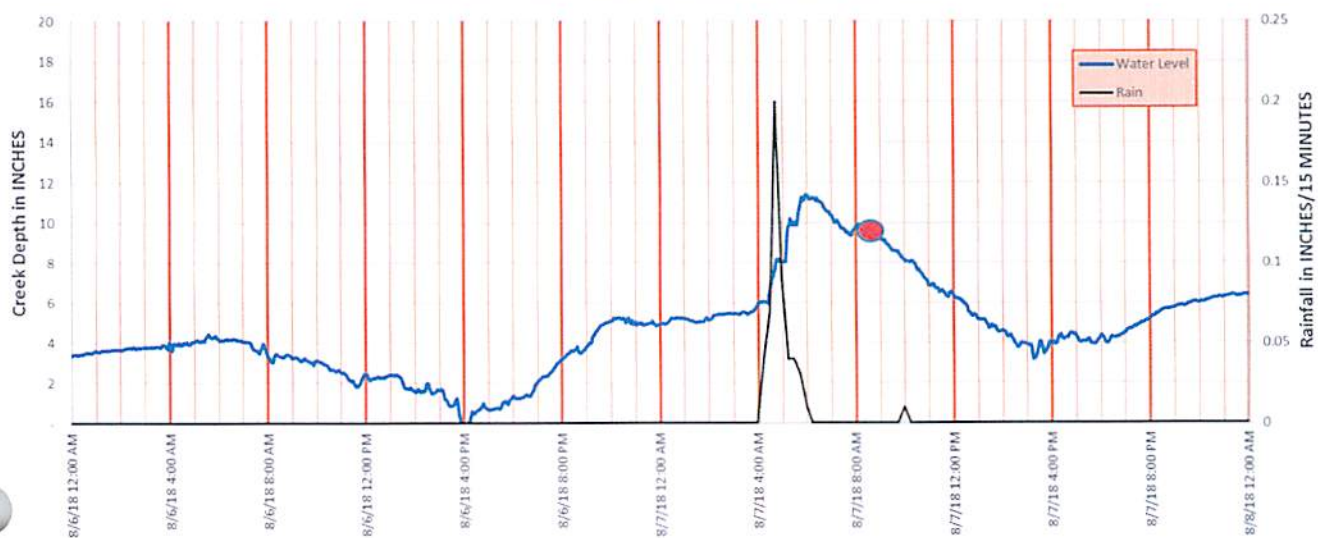
March 19, 2018 (apx 11:30AM)

Three Mile Creek Sampling Time



August 7, 2018 (apx 8:40AM)

Three Mile Creek Sampling Time

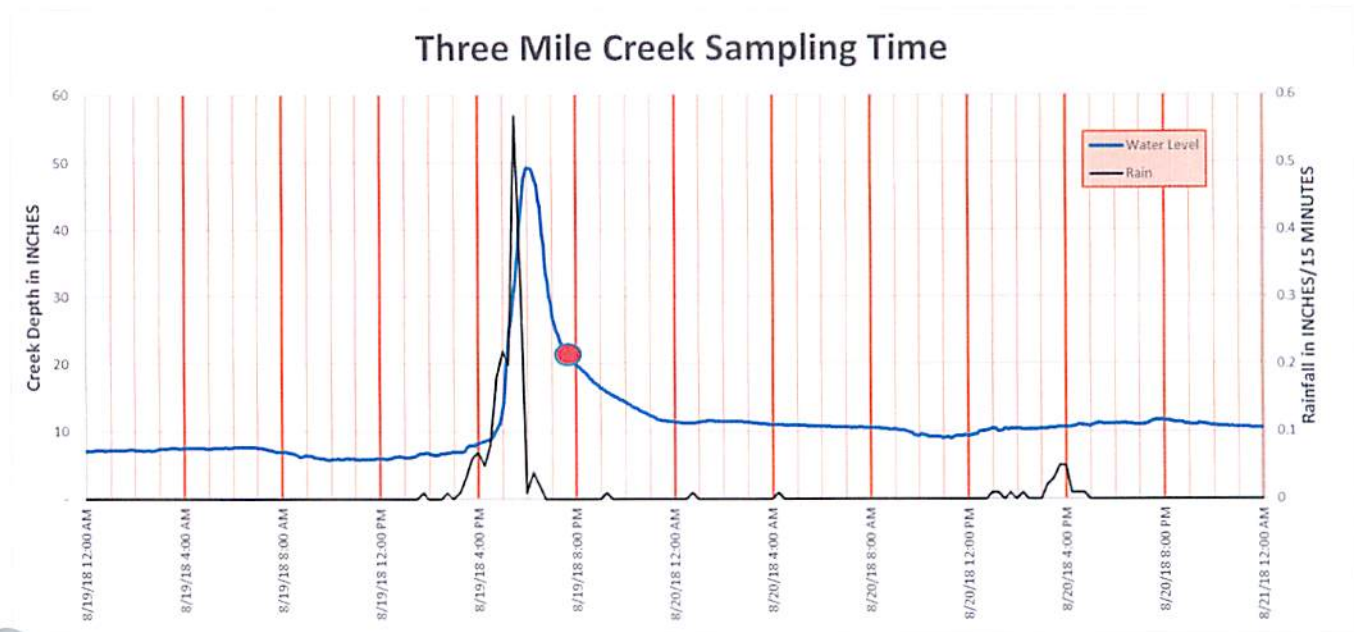


City of Leavenworth - 2018

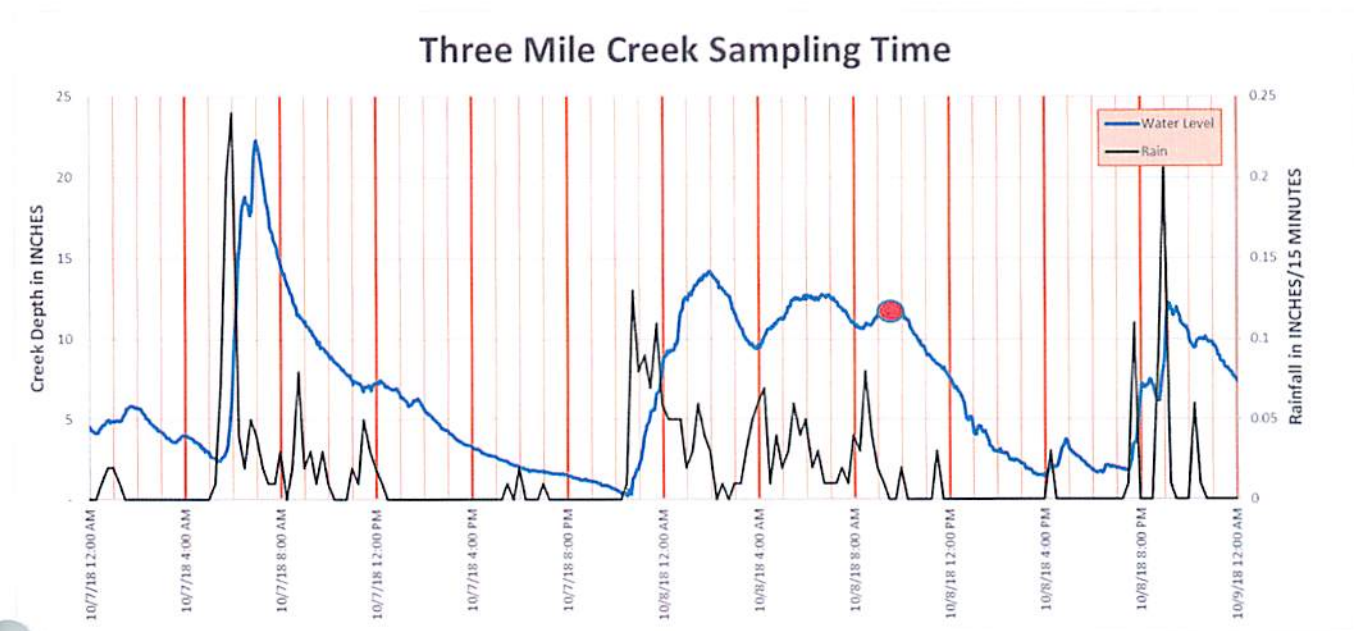
Three Mile Creek - Sampling Time v. Stream Stage and Rainfall

Red Dot ● is approximate Sampling Time

August 19, 2018 (apx 7:30AM)



October 8, 2018 (apx 9:30 AM)



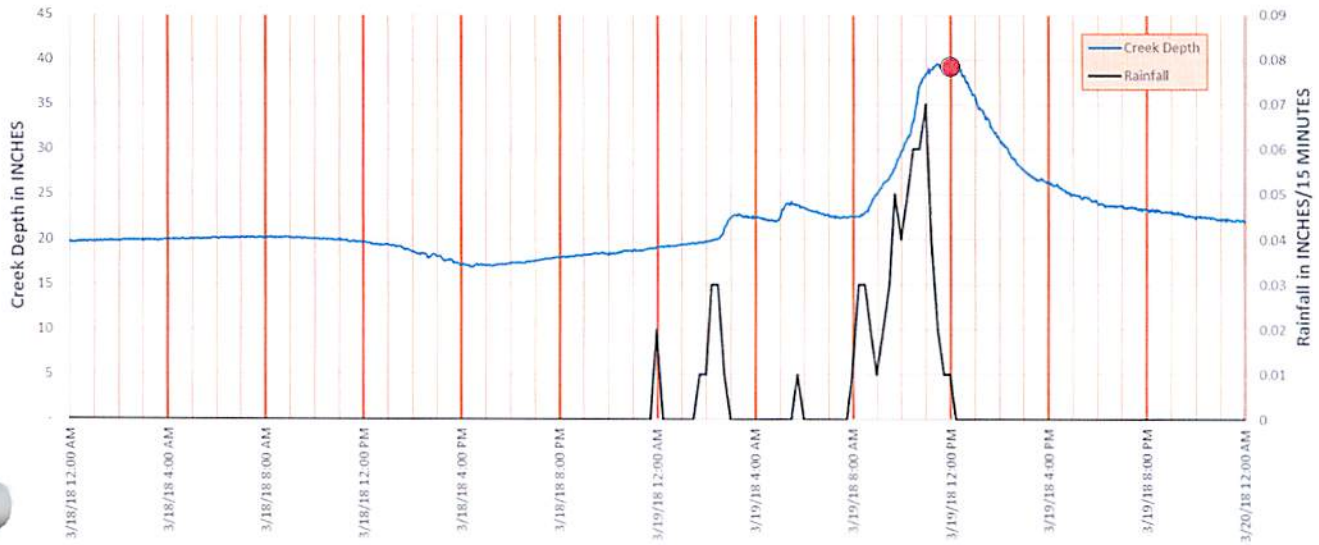
City of Leavenworth – 2018

Five-Mile Creek – Sampling Time v. Stream Stage and Rainfall

Red Dot ● is approximate Sampling Time

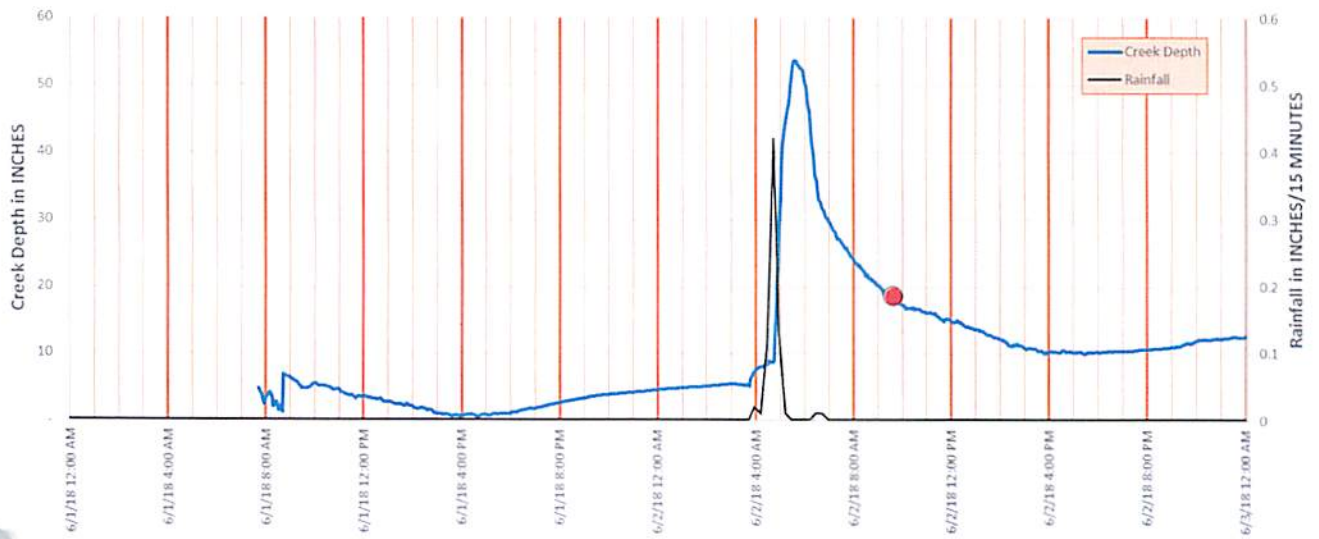
March 19, 2018 (apx 12:00PM)

Five-Mile Creek Sampling Time



June 2, 2018 (apx 9:30AM)

Five-Mile Creek Sampling Time



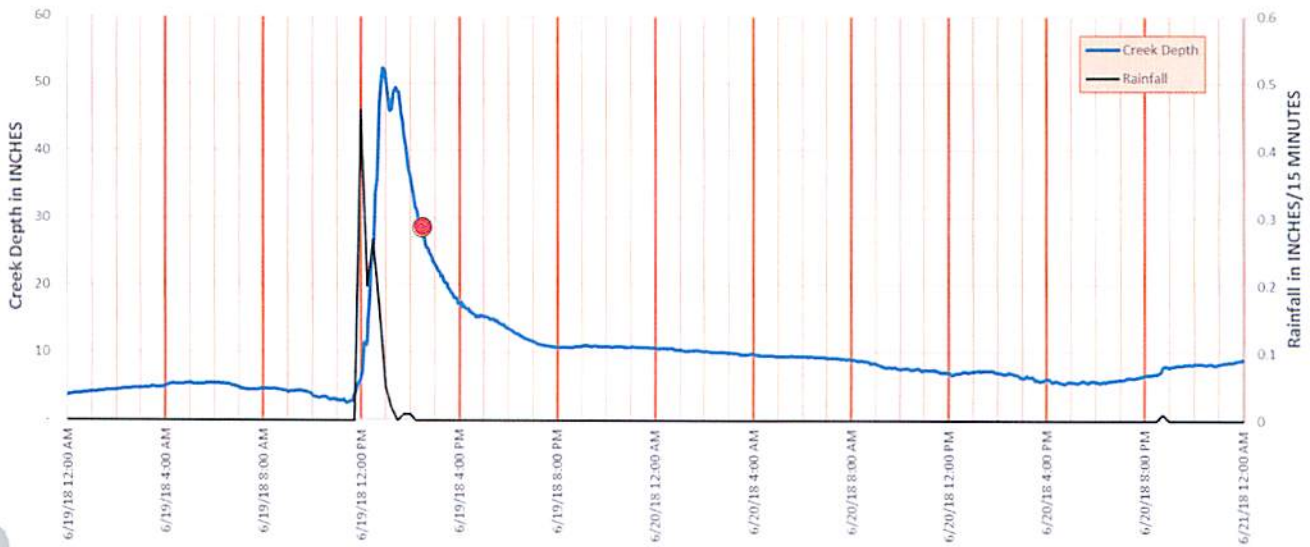
City of Leavenworth – 2018

Five-Mile Creek – Sampling Time v. Stream Stage and Rainfall

Red Dot ● is approximate Sampling Time

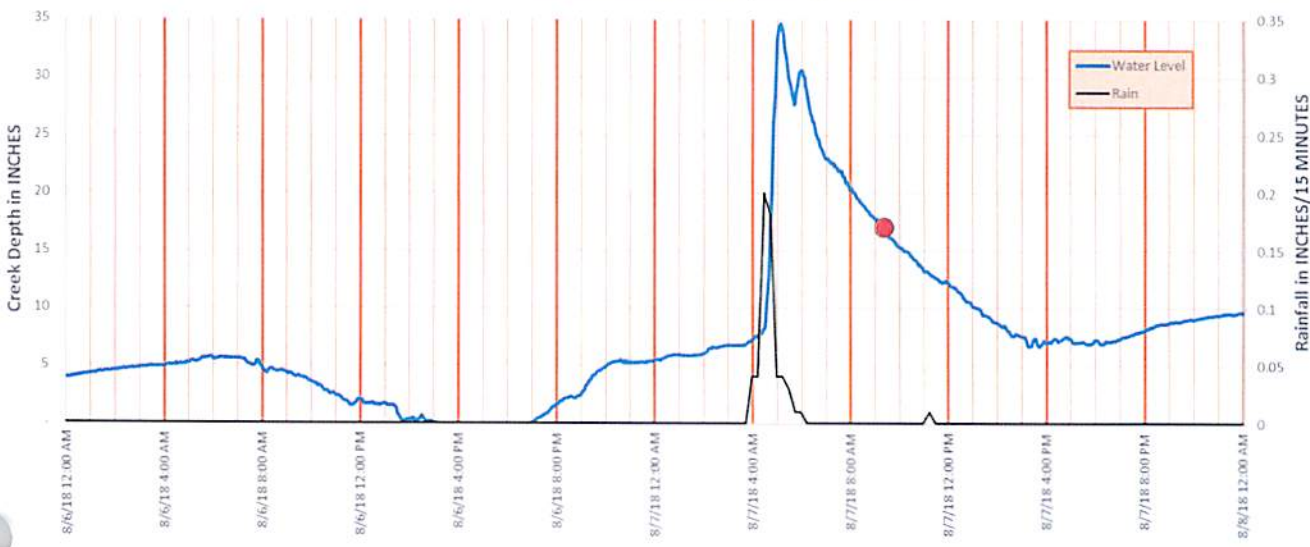
June 19, 2018 (apx 2:45PM)

Five-Mile Creek Sampling Time



August 7, 2018 (apx 9:15AM)

Five-Mile Creek Sampling Time



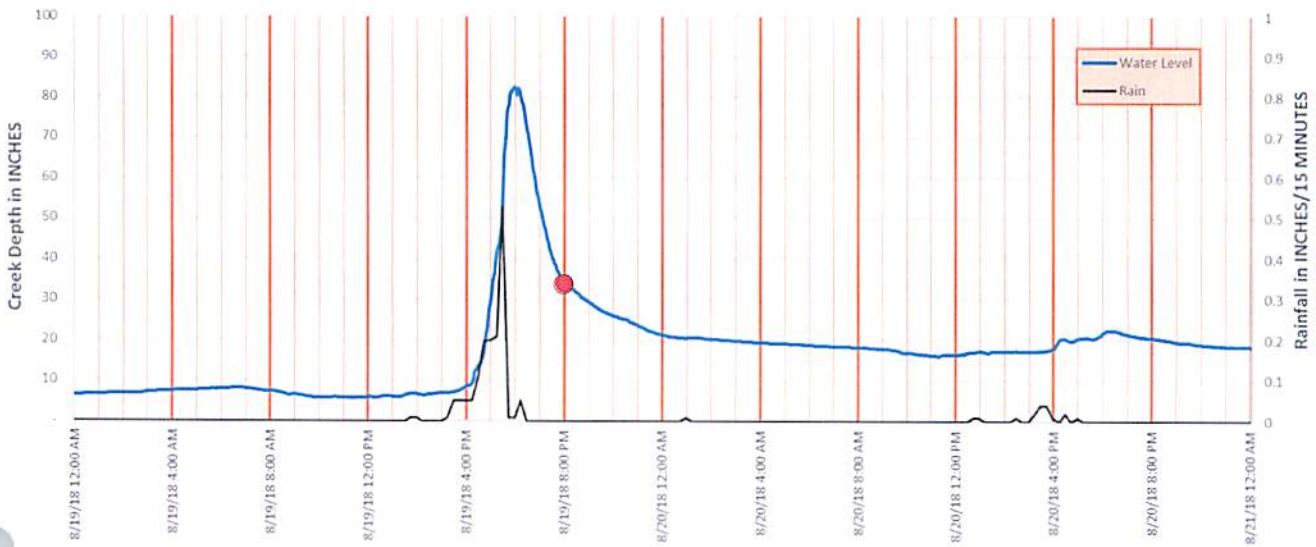
City of Leavenworth – 2018

Five-Mile Creek – Sampling Time v. Stream Stage and Rainfall

Red Dot ● is approximate Sampling Time

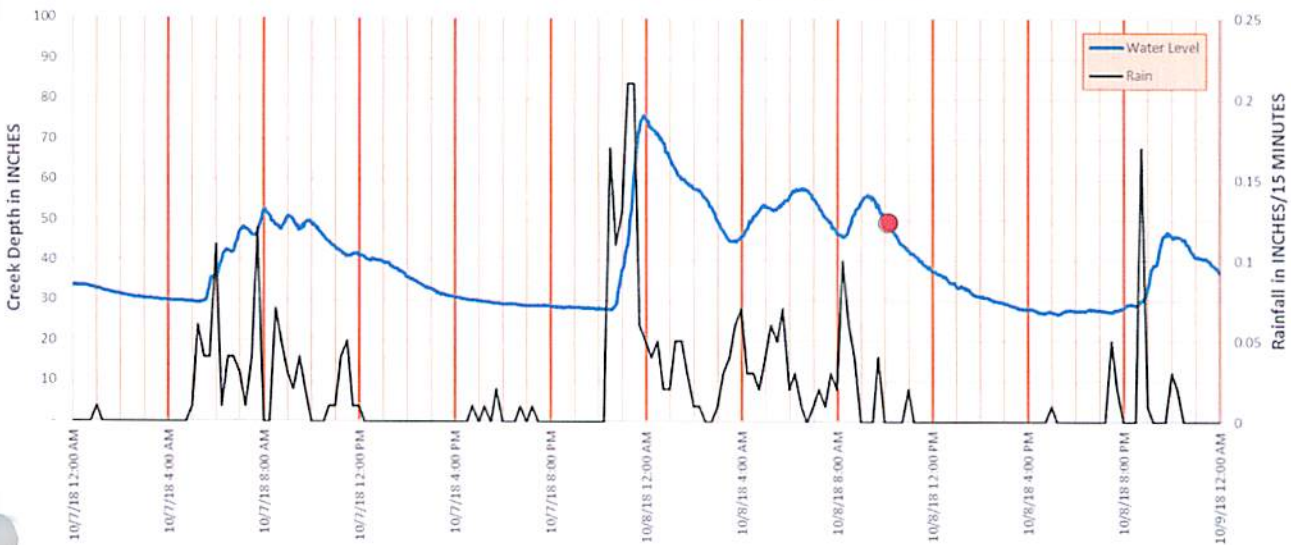
August 19, 2018 (apx 8:00PM)

Five-Mile Creek Sampling Time



October 8, 2018 (apx 10:00AM)

Five-Mile Creek Sampling Time



Chuck Staples

Raw EVENT #1 3-19-18

From: dmr4kdhe@ks.gov
Sent: Tuesday, April 03, 2018 8:50 AM
Subject: Chuck Staples
Cc: Shelly.Shores-Miller@ks.gov
Attachments: eDMR: LEAVENWORTH STORMWATER(KSR440011), M-MO12-SN01, 03/2018
eDMR_Exceptions_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_03_2018_84934895_342018.pdf; eDMR_RawData_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_03_2018_84937111_342018.pdf

A signed discharge monitoring report has been received at KDHE for the subject facility and reporting time period. KDHE hereby acknowledges receipt of the data. The submittal has not yet been reviewed. If we have any questions concerning the submittal, we will notify you by e-mail or telephone.

Program Identified: Kansas Discharge Monitoring Report

State Permit No.: M-MO12-SN01

Federal Permit No.: KSR440011

Facility Name: LEAVENWORTH STORMWATER(KSR440011)

Data Month/Year: 03/2018

Signed: CHARLES H STAPLES

Signature date: 4/3/2018

Attachments:

If you have any questions concerning this e-mail, please contact KDHE at 785.296.5561 or via e-mail at dmr4kdhe@ks.gov.

This is a System Generated Email.

42

 **Chuck Staples**

From: dmr4kdhe@ks.gov
Sent: Tuesday, June 19, 2018 9:07 AM
To: Chuck Staples
Cc: Shelly.Shores-Miller@ks.gov
Subject: eDMR: LEAVENWORTH STORMWATER(KSR440011), M-MO12-SN01, 06/2018
Attachments: eDMR_Exceptions_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_06_2018_979357_1962018.pdf; eDMR_RawData_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_06_2018_9711557_1962018.pdf


A signed discharge monitoring report has been received at KDHE for the subject facility and reporting time period. KDHE hereby acknowledges receipt of the data. The submittal has not yet been reviewed. If we have any questions concerning the submittal, we will notify you by e-mail or telephone.

Program Identified: Kansas Discharge Monitoring Report

State Permit No.: M-MO12-SN01

Federal Permit No.: KSR440011

Facility Name: LEAVENWORTH STORMWATER(KSR440011)

 Data Month/Year: 06/2018

Signed: CHARLES H STAPLES

Signature date: 6/19/2018

Attachments:

If you have any questions concerning this e-mail, please contact KDHE at 785.296.5561 or via e-mail at dmr4kdhe@ks.gov.

This is a System Generated Email.



From: dmr4kdhe@ks.gov
Sent: Monday, July 02, 2018 10:52 AM
To: Chuck Staples
Cc: Shelly.Shores-Miller@ks.gov
Subject: eDMR: LEAVENWORTH STORMWATER(KSR440011), M-MO12-SN01, 06/2018
Attachments: eDMR_Exceptions_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_06_2018_1052226_272018.pdf; eDMR_RawData_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_06_2018_105223550_272018.pdf

A signed discharge monitoring report has been received at KDHE for the subject facility and reporting time period. KDHE hereby acknowledges receipt of the data. The submittal has not yet been reviewed. If we have any questions concerning the submittal, we will notify you by e-mail or telephone.

Program Identified: Kansas Discharge Monitoring Report

State Permit No.: M-MO12-SN01

Federal Permit No.: KSR440011

 Facility Name: LEAVENWORTH STORMWATER(KSR440011)

Data Month/Year: 06/2018

Signed: CHARLES H STAPLES

Signature date: 7/2/2018

Attachments:

If you have any questions concerning this e-mail, please contact KDHE at 785.296.5561 or via e-mail at dmr4kdhe@ks.gov.

This is a System Generated Email.



 **Chuck Staples**

4


From: dmr4kdhe@ks.gov
Sent: Tuesday, August 21, 2018 1:57 PM
To: Chuck Staples
Cc: Shelly.Shores-Miller@ks.gov
Subject: eDMR: LEAVENWORTH STORMWATER(KSR440011), M-MO12-SN01, 08/2018
Attachments: eDMR_Exceptions_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_08_2018_135650488_2182018.pdf; eDMR_RawData_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_08_2018_13565362_2182018.pdf

A signed discharge monitoring report has been received at KDHE for the subject facility and reporting time period. KDHE hereby acknowledges receipt of the data. The submittal has not yet been reviewed. If we have any questions concerning the submittal, we will notify you by e-mail or telephone.

Program Identified: Kansas Discharge Monitoring Report

State Permit No.: M-MO12-SN01

Federal Permit No.: KSR440011

 Facility Name: LEAVENWORTH STORMWATER(KSR440011)

Report Date Month/Year: 08/2018

Signed: CHARLES H STAPLES

Signature date: 8/21/2018

Attachments:

If you have any questions concerning this e-mail, please contact KDHE at 785.296.5561 or via e-mail at dmr4kdhe@ks.gov.

This is a System Generated Email.



From: dmr4kdhe@ks.gov
Sent: Wednesday, September 26, 2018 8:42 AM
To: Chuck Staples
Cc: Shelly.Shores-Miller@ks.gov
Subject: eDMR: LEAVENWORTH STORMWATER(KSR440011), M-MO12-SN01, 08/2018
Attachments: eDMR_Exceptions_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_08_2018_84226186_2692018.pdf; eDMR_RawData_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_08_2018_84228261_2692018.pdf

A signed discharge monitoring report has been received at KDHE for the subject facility and reporting time period. KDHE hereby acknowledges receipt of the data. The submittal has not yet been reviewed. If we have any questions concerning the submittal, we will notify you by e-mail or telephone.

Program Identified: Kansas Discharge Monitoring Report

State Permit No.: M-MO12-SN01

Federal Permit No.: KSR440011

 Facility Name: LEAVENWORTH STORMWATER(KSR440011)

Data Month/Year: 08/2018

Signed: CHARLES H STAPLES

Signature date: 9/26/2018

Attachments:

If you have any questions concerning this e-mail, please contact KDHE at 785.296.5561 or via e-mail at dmr4kdhe@ks.gov.

This is a System Generated Email.

 Chuck Staples

↳

From: dmr4kdhe@ks.gov
Sent: Monday, October 22, 2018 10:39 AM
To: Chuck Staples
Cc: Shelly.Shores-Miller@ks.gov
Subject: eDMR: LEAVENWORTH STORMWATER(KSR440011), M-MO12-SN01, 10/2018
Attachments: eDMR_Exceptions_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_10_2018_103911973_22102018.pdf; eDMR_RawData_Report_LEAVENWORTH STORMWATER(KSR440011)_M-MO12-SN01_10_2018_103914266_22102018.pdf

A signed discharge monitoring report has been received at KDHE for the subject facility and reporting time period. KDHE hereby acknowledges receipt of the data. The submittal has not yet been reviewed. If we have any questions concerning the submittal, we will notify you by e-mail or telephone.

Program Identified: Kansas Discharge Monitoring Report

State Permit No.: M-MO12-SN01

Federal Permit No.: KSR440011

 Facility Name: LEAVENWORTH STORMWATER(KSR440011)

Data Month/Year: 10/2018

Signed: CHARLES H STAPLES

Signature date: 10/22/2018

Attachments:

If you have any questions concerning this e-mail, please contact KDHE at 785.296.5561 or via e-mail at dmr4kdhe@ks.gov.

This is a System Generated Email.



Section G

Final Report

Certification

G: Final Report

1. Effectiveness of pollutant source controls, e.g. public education, identification and elimination of illicit discharges, and the construction site stormwater runoff control program.

- a. **Public Education, outreach, participation and Involvement.** City opinion on overall effectiveness in these areas is rated as “Very Effective”. The following paragraphs highlight activities that contribute to this assessment.
- Stormwater information is disseminated to the public through numerous channels such as the City newsletter, press releases, posting documents on the City website, placing reference material at the public library and several social media platforms. Social media platforms used by the Public Information Officer (PIO) include Facebook, Twitter, and YouTube in the effort to reach a larger population in a timely manner.
 - City at Leavenworth High School on Earth Day with sewer cleaning and TV equipment and information.
 - The City engages the public by calling for volunteers to work on local initiatives through the several lines of communication discussed earlier. The Annual Spring Clean Up has been a long-term ongoing effective program (42 groups, over 1000 participants) that reduces pollution as well increases the public awareness of stormwater BMPs and other City programs.
 - Free drop off of large items on Free Saturdays continues to be a popular program.
 - Calls for civic organizations to clean and make improvements to City parks throughout the year are being made through an established Adopt-a-Park program with 15 parks currently adopted.
 - Arbor Day is observed yearly and the City continues to be part of the Tree City USA program.
 - Brochures and newsletters are published throughout the year that include code enforcement information and more information about any discarded debris and the proper place to discard it.
 - City receives occasional calls from groups such as Boy Scouts related to public service projects. There were no known inquiries in 2018.
- b. **Illicit Discharge Detection and Elimination.** City opinion on overall effectiveness in these areas is rated as “Generally Effective”. The following paragraphs highlight activities that contribute to this assessment.
- Contact from citizens with City staff regarding water quality issues or concerns are referred to Public Works Department for follow up. Typically an engineer or building inspector will coordinate with Water Pollution Control personnel (with the camera if needed) to assess and address the situation.
 - City employees are reminded at staff meetings and safety meetings to report any activity that is questionable to their supervisor and/or the City Engineering Office.
 - In order to control improper disposal of waste to the storm sewer system, the City of Leavenworth makes material available through flyers and online regarding household hazardous waste and its proper disposal. Parks Department promotes a “Pick up Your Dog Doo” plan.

- City operates a leaf collection program as well as provides free disposal of leaves and grass site to reduce impact on stormwater system and stream channels.
- Storm sewers are examined with the City's camera truck that allows for sewer lines to be videotaped and searched for improper connections or line failures. The use of a "Pole Cam" continues to facilitate a much quicker inspection time.
- The City has completed the storm sewer map and it is available to staff and the public on the GIS system, both online and as a paper map (upon request). Technical information on the map continues to be verified through use of physical inspection and hand-held GPS, particularly to correctly note diameters and locations of storm sewer structures. The final GIS database will include size, horizontal location as well as invert and top elevations for all storm structures and outfalls.
- The City has an ongoing cleaning and CCTV program for the sanitary sewer lines. This work has identified several locations that that were repaired as part of the current effort to reduce Inflow and infiltration.
- Staff inspects 33 sewer lines at creek crossings at least three times each year. This includes regularly scheduled inspections as well as after heavy rainfall events. There are an additional 200 crossing locations that are inspected periodically.
- The City has enforced requirements that all exterior clean-out caps on sanitary sewer lines be "screw caps" rather than "press-on caps" this has contributed to the reduced number of Sanitary Sewer Overflow (SSO) events that that release sewer water to the environment.
- The City continues inspection of commercial facilities with grease traps. This program is a combination of inspection and education to ensure that the grease traps are properly maintained which prevents sanitary sewer water from entering the environment. To improve compliance the City is planning to implement a permit/fee/fine structure.

c. **Construction Site Stormwater Runoff Control.** City opinion on overall effectiveness in these areas is rated as "Very Effective". The following paragraphs highlight activities that contribute to this assessment.

- City implemented a "Land Disturbance Permit" (LDP) in early 2015 and strengthened it in 2016 with the adoption of a fee and fine structure for LDPs and erosion. No changes were made in 2018. The LDP has been very successful in ensuring owners and contractors know their responsibilities. It has dramatically reduced erosion and sedimentation from construction sites.
- Construction site runoff is generally inspected as follows:
 - Work within the right-of-way and/or City-bid projects is inspected by Engineering Staff Technicians on a regular basis.
 - Work on private property is inspected by Building Inspections Staff.
- Plan review and construction site inspection are the City's first line of defense in protecting water quality in developing areas. The initial planning process for large and small developments includes a formal focus on stormwater quantity, quality and control measures as part of the Development Review Committee meeting with project sponsors and developers. Staff comments on plans reviewed are submitted in writing.

- Weekly staff meetings are held in the Public Works office. Review of stormwater issues on current City and developer projects both in the design and construction phase is discussed.
- The City guidelines related to stormwater quantity and quality were approved by the City Commission in early 2015. They rely upon the technical work completed in other documents – particularly the MARC BMP Manual, APWA Section 5600 and City of Leavenworth Stormwater Master Plan 1995. These documents are generally accepted by professional engineers and developers as part of the development process. There were no changes in 2018.
- City staff has attended a variety of training and educational events to become more effective in addressing the construction site runoff situation. It includes attendance at regional classes, vendor demonstrations, and focused training on installation/inspection of erosion control systems.

2. ***Address all other BMPs implemented (generally the structural BMPs) under the stormwater management program and address their effectiveness.*** City opinion on overall effectiveness in these areas is rated as “Generally Effective”. The following paragraphs highlight activities that contribute to this assessment.

a. **The City of Leavenworth addresses structural BMPs with the following efforts:**

- Created a program where all BMPs created as part of a city project or a development project must submit an annual report on maintenance, and are subject to city inspection. An annual meeting is also conducted to discuss these issues (and others) with BMP owners.
- Require all project plans with BMPs
 - a. Have the maintenance activities and schedule included in the plan, and a signature by the owner that they have been reviewed.
 - b. Require a two year maintenance period on all vegetation
- Focused BMP selection for public and private projects on more passive than active BMP measures. Typical projects are bio-swales, reduced capacity inlets (allowing pollutants to settle), stream health improvement, and increased use of a textured/rough concrete.
- Created a monitoring plan to determine if detention/retention facilities meet their design goals for water quantity, and seek methods to improve performance if necessary.

b. **Other BMPs implemented by the City as part of Pollution Prevention/Good Housekeeping for Municipal Operations.**

- Operate a leaf collection program each fall (curbside pick-up is one-half of the City each year),
- Efficient application of salt and sand to the roadways through better equipment (ground speed control), street sweeping operations, and extended sweeping season are all effective in decreasing pollutants from entering the storm sewer system. GPS was added to most snow plow equipment in 2018
- Implement an extended street sweeping program, exceeding the goals of at least once per month on Collector and Arterial Streets, and three times per year in residential areas.

- City has two full-time employees dedicated to the inspecting and cleaning of storm inlet structures with a vacuum truck (and occasional augmentation from other workers)
 - Water Pollution Control dye tests 33 creek crossing three times a year for an annual total of 132. WPC is working with our GIS department and have identified over 200 creek crossings that are inspected annually.
 - City staff reviewed the general state of water quality management at selected City facilities throughout the permit period. Some specific actions that came from this effort.
 - Grading was improved around portions of the salt/sand storage areas
 - Snow storage area berm was installed
 - Issues with the grease/oil/sand separator and internal processes at the Municipal Service Center were identified and necessary changes and repairs made.
 - Two municipal parking lots were constructed with bio-swales and reduced capacity inlets. A third parking lot is under design with similar elements.
 - Roadway improvements adjacent to the Service Center will include construction of a larger water quality feature related to the entire site.
- c. **Further Discussion of BMPs in general.** City opinion is that the BMP approach to the current level of stormwater activity in Leavenworth is “entirely appropriate and generally effective”.

They address the main concerns of the city: water quantity, water quality and construction site run-off. The implementation of the LDP has improved erosion and runoff during and after construction on many projects. The aggressive street sweeping program catches much of the salt and sand from winter operations before the spring rains. Grease trap and detention basin inspection are important programs. Staff is aware of the significance of the stormwater issues reviewed by KDHE and seeks to ensure compliance by having an empowered staff and opportunities for the public to comment or become involved.

- d. **An assessment of the effectiveness of the BMPs towards achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP).** Current BMP installations are seen as “generally effective” for water quality. Pond performance is seen as less than expected when reviewing water quantity issues.

The City of Leavenworth has evaluated the functionality of various types of BMPs in Leavenworth while preparing this document and consideration of an updated stormwater design manual. BMP overall effectiveness, economy, and general upkeep needs will drive BMP selection on future developments in Leavenworth. For instance, most in-situ soils in Leavenworth have low permeability which has led the Public Works staff to favor BMPs focused more on pollutant removal rather than stormwater infiltration. Recently constructed detention basins and bank stabilization projects have proven stable in normal rains.

The increased numbers of programs and greater inspection efforts have surely improved water quality in at least the local area of implementation. It is clear that without additional

enforcement options there is minimal effort or interest on the part of owners and contractors on complying with record keeping and maintenance for all BMPs.

3. **Summarize water quality test results, if such testing has been conducted, and address any trends or outliers, i.e., unusually high or low pollutant concentrations. As the data is somewhat limited (perhaps only data over the last five years), definitive conclusions may not be possible; however, if trends are observed, some adjustment in the Stormwater Management Program (SMP) may be justified.** A summary of the results for the five years of sampling is included in this narrative along with several graphs and charts in Appendix A and C. The City's opinion is it met all the program requirements. In general the City observed the following during this water quality sampling process:
- a. **The stream stage is extremely sensitive to rainfall intensity and duration.** It was difficult to have all of the samples taken during a “rising stream” stage. Details on this have been reported in previous annual reports.
 - b. **Measuring stream volume is difficult.** City has used manual methods and “stage-discharge” charts to estimate volume while sampling. Ultimately, it was found most effective to use the manual methods to calculate volume.
 - c. **Differences in water quality data are difficult to interpret.** A very simplistic analysis shows that in 2014 water quality was improved by flowing through the City of Leavenworth. This was NOT TRUE in 2015, 2016, 2017 or 2018. Data does show that water generally degraded as it passed through Leavenworth although 3-Mile Creek was not degraded in 2018, and 5-Mile Creek was not degraded in 2015.


Staff opinion is that the tables show generally better water quality in 5-Mile Creek from 2014 to 2017. In 2018 water quality was much better in 3-Mile Creek than 5-Mile Creek. Speculation is that 3-Mile Creek generally suffers from receiving urban runoff and residential housing on smaller lots, and 5-Mile Creek is larger sized properties with more vegetation. The 2018 degradation in 5-Mile Creek is suspected as being a by-product of increasing residential and commercial construction activity although no single set of test results can identify specific issues.

4. **Address any SMP modifications which will be considered and possibly implemented in the next few years (up to five years).** The City expects that the following issues will be evaluated in the next five years as part of the SMP.
- a. Improve interactions with defunct HOAs related to BMP management.
 - b. Improve citizen contact and reduce ineffective methods such as tracking use of information at the library.
 - c. Consider adopting revised APWA 5600 specifications.
 - d. Require monitoring to ensure ponds meet design criteria.
 - e. Consider revisions to the current “Stormwater Guidelines” especially related to effective implementation, and consider revisions to the fee and fine schedules.

- f. Expand awareness of BMP maintenance expectations and requirements with a fee and fine structure, especially for ponds and grease traps.
- g. Increase staff training related to construction site inspection and post construction inspection activities throughout the year.
- h. Increase exposure of staff members from building inspection and code enforcement to stormwater issues, especially with illicit discharge issues.
- i. Seek opportunities with community groups to improve awareness of stormwater issues.
- j. Construct stormwater quality and quantity improvements on City facilities.
- k. Consider how and when BMPs can be added to existing facilities as they are modified or upgraded.

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Permittee:  Date Signed 2-27-19
(Legally responsible person)

Name Printed: PAUL KEAMER Title City Manager

40 CFR 122.22 Signatories to permit applications and reports.

(a) Application. All permit applications shall be signed by either a principal executive officer or ranking elected official.

All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person.

Please note the submission requirements on page 1. Submit this report to:

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Municipal Programs Section

1000 SW Jackson Street, Suite 420

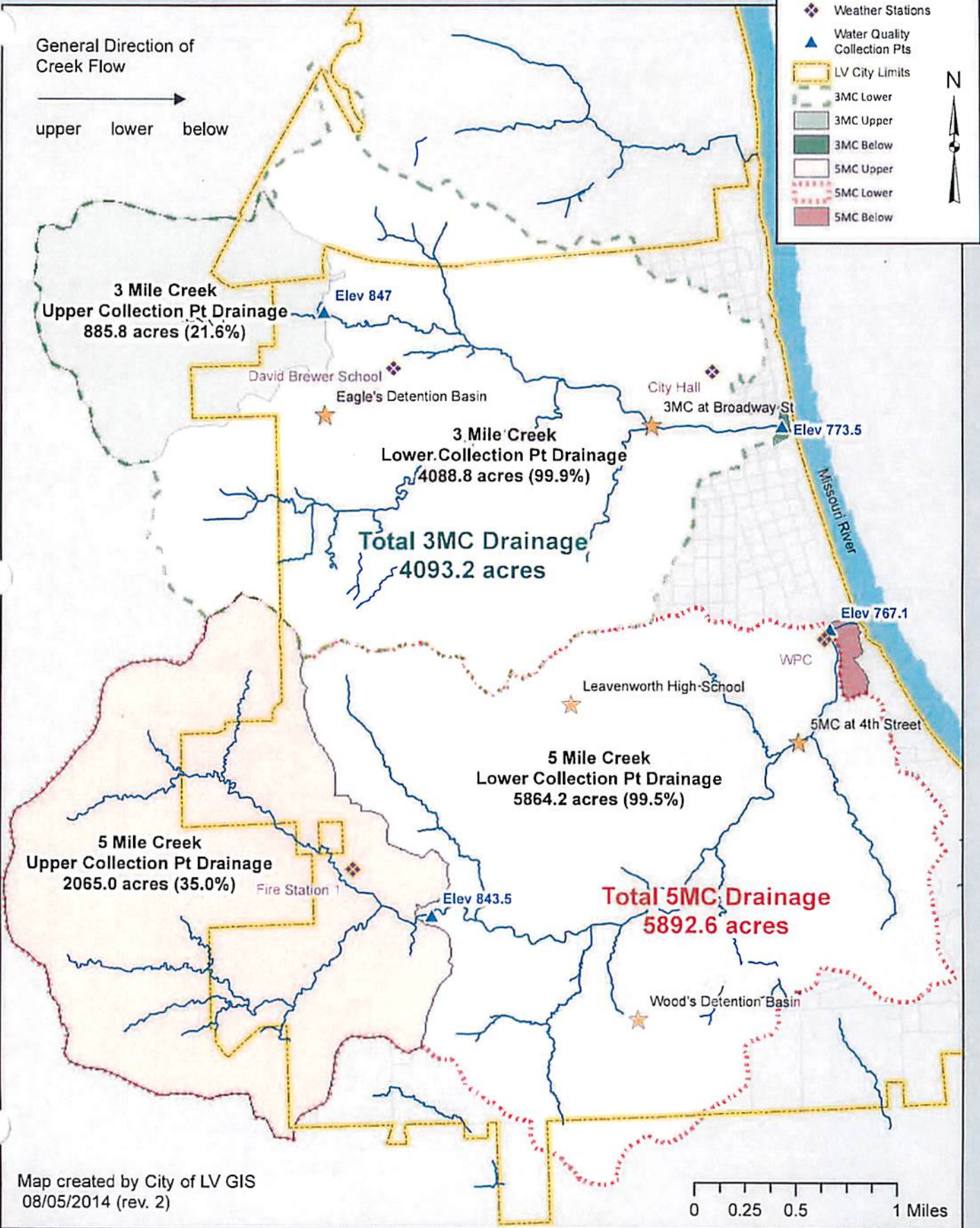
Topeka, Kansas 66612

Appendix A

Summary of Sampling Data










- Basin Maps
 - Overall
 - 3-Mile Creek
 - 5-Mile Creek
- Location Detail Coordinates
- Weather Monthly Summary Sheets (City Hall) with sample days indicated
- Data Collection Time Summary (Shown on Water Quality Sheet)
- Data Collection Visual Summary
- Summary of Water Quality Data (Six storms in 2018)
- Summary of 2014 – 2018 Water Quality Data

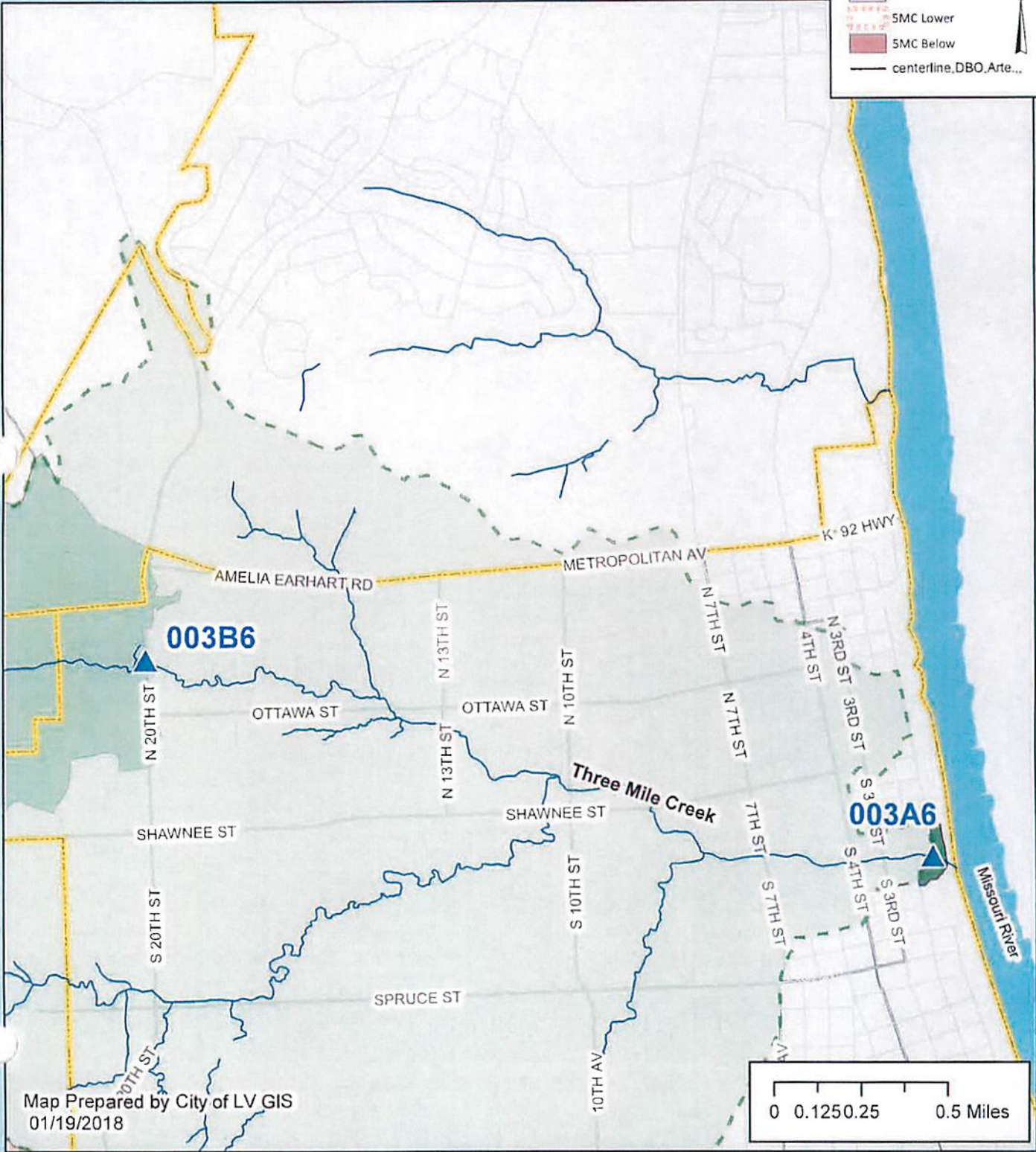
City of Leavenworth, KS Stormwater Management Data Collection



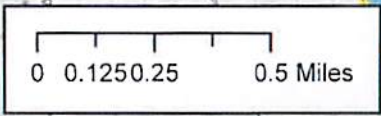
City of Leavenworth, KS Three Mile Creek Sampling Sites

Legend

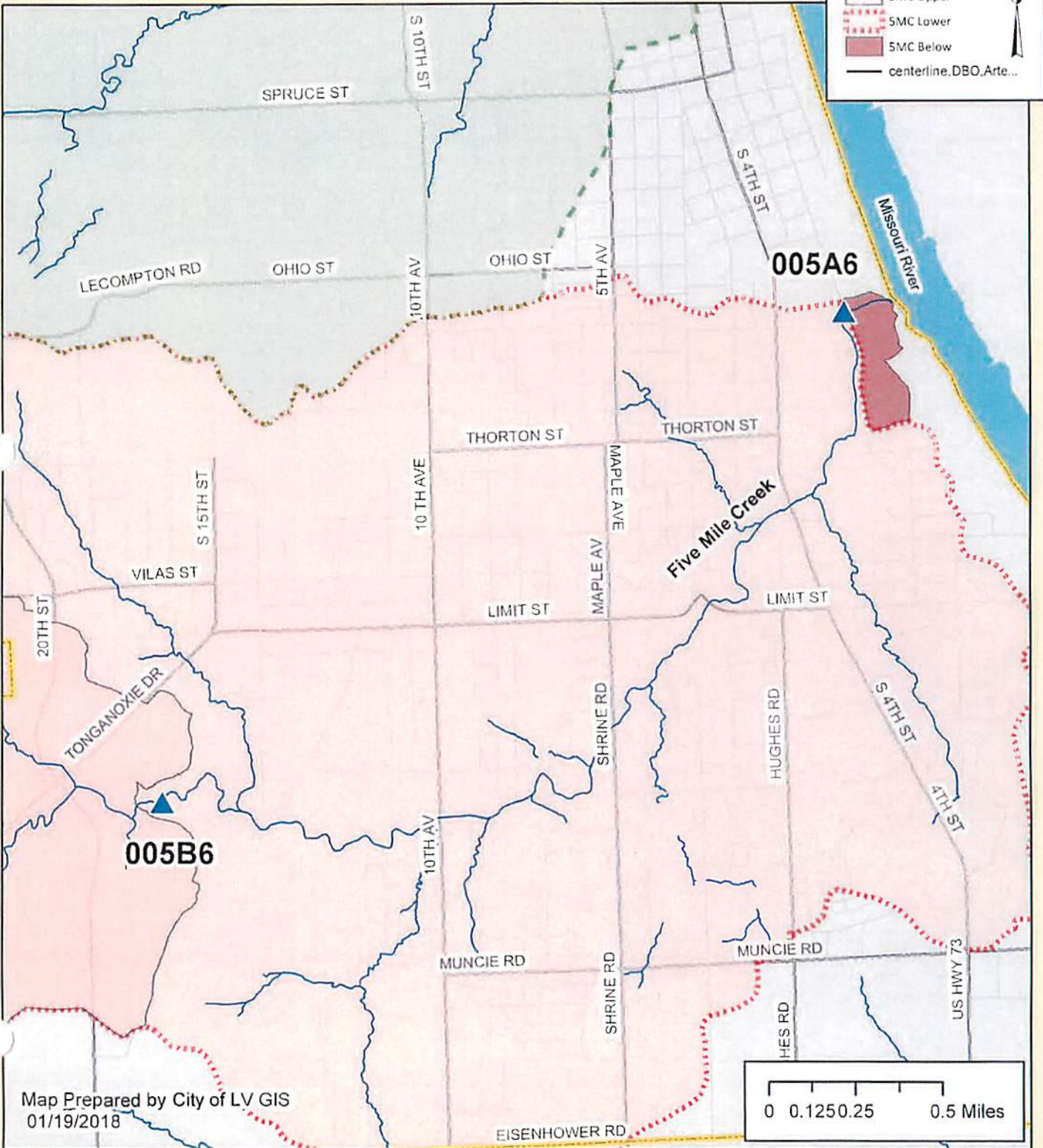
-  Water Quality Collection Pts
-  LV City Limits
-  3MC Lower
-  3MC Upper
-  3MC Below
-  5MC Upper
-  5MC Lower
-  5MC Below
-  centerline,DBO.Arte...



Map Prepared by City of LV GIS
01/19/2018



City of Leavenworth, KS Five Mile Creek Sampling Sites

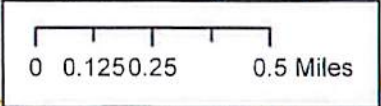


Legend

- ▲ Water Quality Collection Pts
- LV City Limits
- 3MC Lower
- 3MC Upper
- 3MC Below
- 5MC Upper
- 5MC Lower
- 5MC Below
- centerline.DBO.Arte...



Map Prepared by City of LV GIS
01/19/2018



City of Leavenworth, Kansas
Water Quality Collection Points

Location	KS ID	Type	Measurement Location	Elevation	Additional Height	Baseline	LATITUDE	LONGITUDE
5MC West	005B6	Deck	@7th vert f/ east upstr edge	843.5	Handrail Elev = 848.3	848.3	39.28160093	-94.94268289
3MC West	003B6	Deck	@4th vert f/ north upstr edg	847.0	Handrail Elev = 848.1	848.1	39.32462470	-94.95067177
5MC East	005A6	Deck	@5th vert f/ north upstr edg	767.1	Deck Elev = 767.1	767.1	39.30099774	-94.90515459
3MC East	003A6	Deck	@4th vert f/ north upstr edg	773.5	Handrail Elev = 777.0	777.0	39.31544044	-94.90893167

Update by City of Leavenworth GIS, February 16, 2018

Kansas FIPS 1501 North (Decimal Degrees)

MONTHLY CLIMATOLOGICAL SUMMARY for JAN. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	-1.0	8.5	3:45p	-9.4	7:30a	66.0	0.0	0.00	2.6	15.0	1:45p	N
2	10.5	21.8	4:00p	-2.5	7:45a	54.5	0.0	0.00	3.0	18.0	4:15p	SW
3	19.9	24.7	5:30a	11.3	12:00m	45.1	0.0	0.00	5.3	27.0	5:00a	NNW
4	14.2	23.5	4:30p	5.8	7:45a	50.8	0.0	0.00	1.6	8.0	4:00a	SE
5	18.4	26.8	2:15p	12.6	4:15a	46.6	0.0	0.00	3.6	13.0	10:15a	NE
6	21.1	30.6	12:00m	11.4	8:00a	43.9	0.0	0.00	3.5	14.0	2:45p	SE
7	35.2	38.0	8:15a	30.6	12:15a	29.8	0.0	0.05	1.9	14.0	4:00a	SSE
8	37.6	52.8	3:00p	27.4	7:45a	27.4	0.0	0.00	0.5	6.0	9:00a	NW
9	37.4	43.7	3:00p	31.5	4:15a	27.6	0.0	0.00	1.3	12.0	5:00p	SE
10	47.4	56.3	7:30p	38.7	4:00a	17.6	0.0	0.00	5.9	28.0	12:45p	S
11	24.6	51.5	12:15a	11.6	12:00m	40.4	0.0	0.08	6.5	31.0	8:00a	NNW
12	10.9	15.7	1:45p	4.9	7:45a	54.1	0.0	0.00	5.3	20.0	12:15a	NNW
13	15.7	19.6	8:30p	11.1	5:45a	49.3	0.0	0.00	2.7	14.0	2:00a	N
14	24.1	34.4	11:30p	16.5	4:00a	40.9	0.0	0.13	3.6	18.0	3:30p	SE
15	11.9	34.0	12:15a	0.1	12:00m	53.1	0.0	0.00	7.0	34.0	2:45a	NNW
16	2.8	9.2	4:15p	-3.2	5:15a	62.2	0.0	0.00	3.3	16.0	10:15a	WNW
17	13.3	25.1	4:00p	1.4	2:30a	51.7	0.0	0.00	3.2	17.0	4:15p	W
18	28.0	38.4	3:45p	16.8	12:15a	37.0	0.0	0.00	4.7	23.0	11:15a	S
19	39.1	46.7	4:30p	30.4	7:45a	25.9	0.0	0.00	6.0	24.0	3:00p	S
20	45.6	51.8	3:45p	36.8	12:00m	19.4	0.0	0.00	2.0	18.0	12:45p	S
21	50.6	62.1	5:00p	34.4	1:15a	14.4	0.0	0.51	1.6	28.0	1:00p	SE
22	36.9	53.2	12:15a	30.4	10:15p	28.1	0.0	0.07	5.4	30.0	8:30p	W
23	30.7	35.5	4:45p	27.2	10:45a	34.3	0.0	0.00	4.0	29.0	1:15a	WNW
24	38.2	51.2	3:45p	28.7	1:30a	26.8	0.0	0.00	1.2	13.0	11:15p	S
25	49.3	65.0	4:30p	36.8	7:45a	15.7	0.0	0.00	5.7	30.0	11:00p	S
26	51.9	58.0	3:30p	39.5	12:00m	13.1	0.0	0.00	10.6	42.0	10:45a	S
27	43.3	55.6	5:15p	31.2	7:45a	21.7	0.0	0.00	2.3	17.0	2:30p	WNW
28	31.3	38.0	12:15a	22.2	12:00m	33.7	0.0	0.00	3.6	22.0	10:15p	N
29	21.5	31.7	4:00p	12.7	7:45a	43.5	0.0	0.00	3.1	18.0	2:00a	NNW
30	36.1	49.7	3:45p	20.8	2:00a	28.9	0.0	0.00	7.1	35.0	11:00p	S
31	43.8	49.9	3:00p	39.5	8:00a	21.2	0.0	0.00	4.3	25.0	12:30a	N
	28.7	65.0	25	-9.4	1	1124.7	0.0	0.84	3.9	42.0	26	S

Max >= 90.0: 0
 Max <= 32.0: 11
 Min <= 32.0: 25
 Min <= 0.0: 3
 Max Rain: 0.51 ON 01/21/18
 Days of Rain: 5 (>.01 in) 2 (>.1 in) 0 (>1 in)
 Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for FEB. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	26.7	40.4	2:45a	16.2	11:30p	38.3	0.0	0.00	6.6	28.0	7:15a	NNW
2	23.4	34.7	5:30p	11.6	6:45a	41.6	0.0	0.00	4.1	17.0	5:00p	S
3	40.5	50.7	2:15p	31.1	12:30a	24.5	0.0	0.00	7.2	27.0	11:45a	S
4	17.7	39.5	12:15a	5.8	12:00m	47.3	0.0	0.00	6.8	28.0	5:45a	NNW
5	12.8	20.6	4:15p	3.0	4:45a	52.2	0.0	0.00	3.1	13.0	11:30a	W
6	13.9	17.8	4:15p	10.2	7:45a	51.1	0.0	0.00	3.9	14.0	6:30p	NNE
7	20.2	29.8	4:30p	11.2	7:30a	44.8	0.0	0.00	2.4	13.0	10:00a	NNW
8	36.8	52.1	4:30p	20.6	2:30a	28.2	0.0	0.00	4.2	20.0	1:15p	S
9	29.0	45.7	12:15a	15.7	12:00m	36.0	0.0	0.00	7.0	23.0	9:30p	N
10	16.2	21.8	3:45p	11.4	8:00a	48.8	0.0	0.00	6.9	27.0	1:15a	N
11	21.0	34.0	4:00p	12.0	8:15a	44.0	0.0	0.00	3.4	17.0	12:15a	NNW
12	24.1	35.0	4:15p	13.8	7:00a	40.9	0.0	0.00	3.4	17.0	4:30p	E
13	36.2	49.4	3:30p	25.8	6:00a	28.8	0.0	0.00	4.3	22.0	3:00p	S
14	45.5	57.1	4:45p	36.6	12:15a	19.5	0.0	0.00	2.5	18.0	8:00a	S
15	53.4	63.3	11:15a	34.7	12:00m	11.6	0.0	0.00	6.2	33.0	11:00p	NNW
16	29.1	36.0	3:30p	20.6	9:00a	35.9	0.0	0.00	4.3	27.0	1:15a	NNW
17	39.6	53.6	4:00p	28.3	12:15a	25.4	0.0	0.00	3.8	23.0	11:45a	NNW
18	46.8	56.7	4:30p	30.1	2:00a	18.2	0.0	0.00	8.4	42.0	10:15a	S
19	42.1	64.8	8:45a	28.4	11:45p	22.9	0.0	0.02	6.2	33.0	5:00a	NNW
20	24.8	29.5	1:15a	18.6	12:00m	40.2	0.0	0.57	2.4	13.0	9:30a	NNW
21	21.1	26.6	4:45p	14.0	7:00a	43.9	0.0	0.00	2.9	11.0	12:00p	N
22	29.3	32.9	8:00p	25.3	1:45a	35.7	0.0	0.08	1.1	9.0	12:30a	E
23	33.4	35.3	3:45p	32.4	1:30a	31.6	0.0	0.00	1.0	8.0	9:30a	NNW
24	34.4	38.8	2:30p	32.1	11:00p	30.6	0.0	0.16	2.4	16.0	7:45p	W
25	38.3	50.8	4:45p	26.5	7:15a	26.7	0.0	0.00	1.7	15.0	12:15p	W
26	45.1	61.3	3:30p	28.7	7:00a	19.9	0.0	0.00	2.2	20.0	12:45p	SSE
27	55.0	67.7	3:45p	39.7	12:30a	10.2	0.2	0.00	7.7	32.0	4:30p	S
28	51.2	59.0	4:30p	42.7	12:00m	13.8	0.0	0.00	1.7	22.0	11:15p	NNW
	32.4	67.7	27	3.0	5	912.6	0.2	0.83	4.2	42.0	18	NNW

Max >= 90.0: 0
 Max <= 32.0: 6
 Min <= 32.0: 22
 Min <= 0.0: 0

Max Rain: 0.57 ON 02/20/18

Days of Rain: 4 (>.01 in) 2 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for MAR. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	41.4	53.0	4:30p	32.4	7:00a	23.6	0.0	0.00	4.3	21.0	12:45a	NNW
2	43.1	57.9	4:15p	27.2	5:45a	21.9	0.0	0.00	3.0	22.0	3:45p	SE
3	54.0	66.4	4:30p	41.4	7:30a	11.1	0.1	0.00	6.0	25.0	11:00a	SE
4	53.2	61.9	2:30p	45.2	7:15a	11.8	0.0	0.00	7.6	24.0	4:15p	SE
5	48.3	54.2	4:30a	41.8	10:00a	16.7	0.0	0.01	8.7	38.0	12:30p	W
6	35.8	44.7	12:15a	31.4	9:30a	29.2	0.0	0.00	12.6	47.0	8:00a	W
7	31.1	40.8	4:30p	24.4	6:30a	33.9	0.0	0.00	5.8	24.0	2:30a	NNW
8	32.4	45.1	4:30p	20.3	7:30a	32.6	0.0	0.00	2.0	13.0	9:15a	W
9	42.6	58.0	3:45p	28.8	2:00a	22.4	0.0	0.00	3.1	16.0	9:45a	ENE
10	44.2	56.4	2:15p	31.5	5:45a	20.8	0.0	0.00	2.8	14.0	7:15p	ENE
11	38.9	46.6	12:15a	33.4	12:00m	25.0	0.0	0.00	6.6	25.0	11:30a	NNW
12	39.8	52.3	5:30p	31.2	4:45a	25.2	0.0	0.00	4.6	18.0	5:45a	NNW
13	39.3	50.7	5:45p	28.1	7:45a	25.7	0.0	0.00	4.2	22.0	3:30p	NNW
14	45.6	65.0	5:30p	24.7	6:30a	19.4	0.0	0.00	4.2	23.0	2:30p	SW
15	57.9	74.8	5:30p	42.0	7:15a	9.3	2.2	0.00	2.6	16.0	4:00p	SE
16	47.7	56.9	12:15a	40.7	11:15a	17.3	0.0	0.18	7.2	30.0	11:45p	E
17	39.8	47.1	12:15a	37.0	7:15a	25.2	0.0	0.00	5.6	25.0	12:30a	NNW
18	41.9	47.4	5:15p	38.7	9:00a	23.1	0.0	0.00	3.2	16.0	9:15p	ENE
19	43.7	50.2	7:30p	38.9	8:30a	21.3	0.0	0.71	5.3	25.0	2:00p	NNE
20	42.3	46.9	12:15p	39.6	7:15a	22.7	0.0	0.00	4.0	21.0	2:15p	NNW
21	42.6	56.0	6:30p	30.6	8:00a	22.4	0.0	0.00	2.4	16.0	1:00a	NNW
22	52.1	67.1	5:00p	40.0	2:30a	13.1	0.2	0.00	3.6	20.0	2:45p	SE
23	49.8	58.1	4:30p	43.8	6:15a	15.2	0.0	0.00	6.7	22.0	6:00p	E
24	44.1	49.1	12:15a	35.5	11:45p	20.9	0.0	0.04	4.3	27.0	1:15p	NNW
25	38.0	42.8	4:00p	33.0	6:15a	27.0	0.0	0.00	4.1	15.0	3:30p	E
26	45.1	49.4	8:15p	41.4	6:45a	19.9	0.0	0.33	2.7	16.0	7:45a	E
27	42.9	46.6	12:15a	39.1	8:15a	22.1	0.0	0.00	2.5	18.0	3:30a	N
28	46.1	51.8	5:15p	40.2	7:45a	18.9	0.0	0.00	0.6	6.0	3:45p	SE
29	41.3	46.6	12:15a	38.9	3:45a	23.7	0.0	0.00	2.3	14.0	8:00a	N
30	44.5	57.8	5:30p	28.7	7:00a	20.5	0.0	0.00	2.1	18.0	6:45p	NNW
31	49.1	59.5	11:00a	36.1	12:00m	15.9	0.0	0.00	9.3	31.0	6:15a	N

	43.8	74.8	15	20.3	8	657.8	2.5	1.27	4.6	47.0	6	NNW

Max >= 90.0: 0

Max <= 32.0: 0

Min <= 32.0: 11

Min <= 0.0: 0

Max Rain: 0.71 ON 03/19/18

Days of Rain: 4 (>.01 in) 3 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for APR. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	27.2	36.1	12:15a	23.2	11:30p	37.8	0.0	0.14	5.6	30.0	4:45a	NNE
2	27.6	33.6	6:45p	21.5	7:15a	37.4	0.0	0.00	3.7	15.0	1:15p	ESE
3	34.7	39.9	3:00p	26.8	12:00m	30.3	0.0	0.07	7.1	33.0	4:15p	NNW
4	30.9	44.9	6:30p	18.2	7:15a	34.1	0.0	0.00	4.8	28.0	12:30a	NNW
5	50.7	68.4	6:30p	36.4	2:30a	14.5	0.3	0.00	3.5	20.0	12:00p	SE
6	36.0	50.9	12:15a	22.9	9:00p	29.0	0.0	0.00	8.3	39.0	1:15p	N
7	30.9	42.9	6:00p	20.0	7:15a	34.1	0.0	0.00	4.0	19.0	1:30a	N
8	33.6	37.5	10:15a	31.7	2:00a	31.4	0.0	0.08	2.8	24.0	10:30a	SE
9	36.5	41.5	4:00p	31.0	4:00a	28.5	0.0	0.00	1.8	13.0	4:45p	N
10	45.4	61.7	6:00p	28.6	7:15a	19.6	0.0	0.00	2.6	19.0	5:15p	S
11	62.7	80.0	5:30p	46.7	6:30a	6.4	4.1	0.00	6.3	29.0	4:30p	S
12	70.3	81.9	4:00p	54.6	7:15a	1.3	6.6	0.00	6.8	28.0	1:00a	S
13	71.1	82.0	2:30p	55.0	12:00m	1.0	7.1	0.41	11.1	41.0	1:45p	S
14	39.5	55.0	12:15a	30.2	12:00m	25.5	0.0	0.02	4.0	23.0	9:30p	SW
15	29.4	31.6	6:00p	27.0	7:15a	35.6	0.0	0.00	7.3	32.0	5:00a	NNW
16	38.1	51.4	5:30p	27.3	6:30a	26.9	0.0	0.00	4.3	22.0	9:15a	NNW
17	48.7	65.0	6:15p	33.5	7:00a	16.3	0.0	0.00	4.8	19.0	2:00p	E
18	44.1	55.0	12:15a	38.2	10:45p	20.9	0.0	0.00	7.8	31.0	1:45p	NW
19	45.8	58.0	4:15p	32.8	6:45a	19.2	0.0	0.00	3.9	16.0	12:00p	E
20	50.2	62.2	4:00p	34.7	7:00a	14.8	0.0	0.00	3.6	19.0	11:00a	ESE
21	55.0	64.1	6:00p	48.5	8:15a	10.0	0.0	0.00	3.8	17.0	5:15p	ENE
22	57.1	67.1	5:45p	47.8	10:00a	8.0	0.1	0.00	5.0	22.0	6:15p	NE
23	63.7	75.2	5:00p	54.5	4:45a	4.2	2.9	0.00	3.8	19.0	2:30p	N
24	61.8	77.3	3:30p	46.4	6:45a	6.2	3.1	0.00	3.7	30.0	9:15p	NNW
25	51.0	59.4	12:15a	46.3	12:00m	14.0	0.0	0.41	3.8	16.0	1:00a	NNE
26	55.3	69.3	6:45p	40.5	7:15a	10.3	0.6	0.00	2.8	27.0	11:15p	N
27	62.0	76.8	6:45p	44.5	6:30a	6.3	3.4	0.00	5.4	24.0	1:45p	W
28	58.1	67.3	6:15p	47.3	6:45a	7.1	0.3	0.00	3.7	15.0	12:45a	E
29	60.7	71.1	6:00p	48.5	6:00a	5.6	1.2	0.00	5.6	22.0	8:45a	SE
30	70.4	82.3	5:30p	59.1	7:00a	1.4	6.7	0.00	9.9	41.0	5:45p	S
	48.3	82.3	30	18.2	4	537.7	36.4	1.13	5.1	41.0	13	NNW

Max >= 90.0: 0

Max <= 32.0: 1

Min <= 32.0: 12

Min <= 0.0: 0

Max Rain: 0.41 ON 04/13/18

Days of Rain: 6 (>.01 in) 3 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for MAY. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	72.1	77.9	4:45p	63.0	7:45a	0.1	7.2	0.13	7.9	29.0	1:45a	S
2	72.3	82.5	3:30p	62.7	11:45p	0.3	7.6	1.53	6.0	25.0	1:45a	S
3	68.5	81.0	3:15p	60.0	7:00a	1.5	5.0	0.40	4.7	28.0	5:00p	S
4	66.9	78.9	5:15p	56.0	6:45a	2.5	4.3	0.00	1.9	17.0	5:15a	NNW
5	70.8	85.6	6:00p	53.8	6:45a	2.6	8.3	0.00	1.3	27.0	10:15p	W
6	74.5	87.0	5:45p	59.6	6:45a	0.5	10.0	0.00	1.9	18.0	5:15p	N
7	73.8	86.0	5:15p	61.6	6:45a	0.3	9.1	0.00	1.8	12.0	11:30a	NNE
8	75.9	86.2	1:30p	65.1	6:15a	0.0	10.9	0.00	4.1	25.0	12:30p	SE
9	76.4	86.6	4:45p	65.5	6:45a	0.0	11.4	0.00	3.6	22.0	2:00p	WNW
10	76.5	89.0	5:30p	62.7	6:15a	0.2	11.7	0.00	1.9	13.0	6:45p	WNW
11	75.9	158.0	7:00a	65.2	8:00a	0.0	10.9	0.09	5.0	25.0	11:30a	S
12	77.4	84.6	4:00p	70.0	7:45a	0.0	12.4	0.02	4.7	22.0	6:00p	S
13	80.7	90.9	5:30p	71.7	6:45a	0.0	15.7	0.00	4.8	21.0	5:30p	S
14	77.7	86.9	3:30p	70.8	11:15p	0.0	12.7	0.00	2.7	22.0	1:00a	SW
15	71.5	78.1	4:00p	66.8	5:15a	0.0	6.5	0.00	2.9	17.0	3:00a	NNE
16	69.7	82.3	6:15p	60.7	6:30a	0.6	5.4	0.07	1.6	23.0	7:15p	NNE
17	72.4	84.5	3:30p	60.7	6:45a	0.9	8.3	0.00	2.1	18.0	6:00p	SE
18	73.1	86.1	3:00p	57.9	6:30a	1.3	9.4	0.00	2.4	15.0	4:30p	E
19	72.2	83.1	4:45p	65.6	7:00a	0.0	7.2	0.07	1.5	16.0	5:00a	NNW
20	66.7	69.4	2:00p	63.8	11:45p	0.1	1.8	1.32	1.2	15.0	8:30a	N
21	64.2	73.8	6:00p	59.1	7:15a	2.5	1.7	0.00	1.5	9.0	2:30a	W
22	73.4	86.2	6:00p	57.4	5:30a	1.7	10.1	0.00	1.8	15.0	5:00p	SE
23	78.5	90.0	4:15p	64.5	6:15a	0.0	13.5	0.00	2.3	19.0	9:45p	SE
24	74.1	86.2	3:45p	67.2	6:30a	0.0	9.1	0.09	2.7	23.0	4:30p	SSE
25	75.7	86.6	5:15p	67.2	7:15a	0.0	10.7	0.04	2.6	13.0	10:30a	S
26	83.4	95.7	4:30p	70.7	6:30a	0.0	18.4	0.00	3.1	17.0	3:00p	SW
27	84.5	95.1	4:45p	71.3	6:30a	0.0	19.5	0.00	2.4	13.0	3:00p	SW
28	84.4	94.7	5:00p	72.2	6:00a	0.0	19.4	0.00	1.6	11.0	5:30p	SW
29	81.6	93.8	3:15p	69.2	12:00m	0.0	16.6	0.43	2.7	27.0	12:00m	SE
30	75.5	88.1	6:45p	62.7	6:30a	0.4	10.9	0.65	3.0	24.0	4:15p	W
31	80.3	93.6	5:00p	71.3	8:45a	0.0	15.3	0.00	2.0	19.0	6:00a	W

	74.9	158.0	11	53.8	5	15.5	321.0	4.84	2.9	29.0	1	S

Max >= 90.0: 8

Max <= 32.0: 0

Min <= 32.0: 0

Min <= 0.0: 0

Max Rain: 1.53 ON 05/02/18

Days of Rain: 12 (>.01 in) 6 (>.1 in) 2 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for JUN. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	83.3	94.0	3:45p	70.7	6:00a	0.0	18.3	0.00	2.5	15.0	5:45p	SE
2	74.0	82.5	12:15a	64.3	5:00a	0.0	9.0	0.81	4.6	32.0	4:00a	NNW
3	72.5	83.5	5:00p	59.7	6:15a	0.8	8.3	0.00	2.2	19.0	3:00p	WNW
4	68.8	78.1	6:15p	59.5	5:00a	1.2	5.0	0.00	1.0	10.0	4:15p	SE
5	76.1	89.5	5:30p	59.8	6:00a	0.9	12.1	0.00	1.6	13.0	11:15a	S
6	81.8	93.7	4:45p	68.3	6:30a	0.0	16.8	0.00	2.1	36.0	11:45p	S
7	78.1	84.7	7:15p	70.2	12:30a	0.0	13.1	0.00	2.5	23.0	2:30a	ENE
8	81.6	94.2	5:00p	69.2	6:00a	0.0	16.6	0.00	2.0	16.0	6:15p	SE
9	82.9	94.2	5:15p	74.2	6:00a	0.0	17.9	0.00	4.2	28.0	9:15p	S
10	86.6	97.0	4:30p	76.4	6:30a	0.0	21.6	0.00	6.1	22.0	2:15a	S
11	85.3	96.9	4:30p	68.7	12:00m	0.0	20.3	0.12	4.4	27.0	10:15p	SE
12	77.5	87.1	4:30p	68.7	12:45a	0.0	12.5	0.02	2.1	19.0	8:30a	SW
13	77.3	82.7	4:45p	72.3	7:45a	0.0	12.3	0.00	2.8	14.0	10:00a	ENE
14	85.2	98.1	3:15p	72.5	5:30a	0.0	20.2	0.00	4.6	22.0	3:30p	S
15	87.0	95.8	3:30p	78.3	5:45a	0.0	22.0	0.00	6.9	25.0	3:15p	S
16	86.7	95.3	4:00p	78.4	5:45a	0.0	21.7	0.00	6.4	25.0	4:00p	S
17	87.2	95.8	5:15p	78.8	6:45a	0.0	22.2	0.00	6.0	25.0	12:15p	S
18	85.8	94.0	4:00p	77.1	6:00a	0.0	20.8	0.00	5.4	24.0	3:45p	S
19	78.3	85.0	7:15p	69.0	2:15p	0.0	13.3	0.74	2.6	22.0	11:45a	S
20	77.5	82.6	4:15p	68.9	12:00m	0.0	12.5	0.16	3.9	21.0	12:00p	W
21	67.0	73.2	5:15p	63.3	12:30p	0.3	2.4	0.15	3.0	24.0	3:30p	W
22	67.3	70.6	7:00p	64.7	9:00a	0.0	2.3	0.01	1.4	13.0	5:00a	NNW
23	73.7	84.9	6:30p	63.5	4:30a	0.2	8.9	0.00	1.1	9.0	1:15p	W
24	75.8	85.1	1:15p	69.9	3:45a	0.0	10.8	0.06	1.1	22.0	3:00p	SE
25	75.6	84.3	6:30p	68.6	8:00a	0.0	10.6	0.14	3.4	17.0	2:45p	S
26	77.7	88.2	5:00p	65.8	7:30a	0.0	12.7	0.24	2.2	18.0	12:30a	W
27	82.3	92.3	5:15p	70.9	6:45a	0.0	17.3	0.00	1.6	11.0	5:00p	SE
28	89.4	102.1	5:45p	78.2	6:30a	0.0	24.4	0.00	3.1	15.0	2:30p	S
29	89.2	98.5	5:00p	80.2	6:15a	0.0	24.2	0.00	6.9	26.0	11:15a	S
30	82.8	96.3	4:00p	72.0	10:15p	0.0	17.8	1.13	4.9	40.0	10:45p	S

	79.8	102.1	28	59.5	4	3.4	447.9	3.58	3.4	40.0	30	S

Max >= 90.0: 15

Max <= 32.0: 0

Min <= 32.0: 0

Min <= 0.0: 0

Max Rain: 1.13 ON 06/30/18

Days of Rain: 10 (>.01 in) 8 (>.1 in) 1 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for JUL. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	76.4	85.5	5:00p	70.4	6:15a	0.0	11.4	0.09	2.4	16.0	6:30p	W
2	77.9	88.8	5:15p	65.1	6:15a	0.0	12.9	0.00	1.4	12.0	2:15p	ESE
3	84.7	96.8	4:30p	71.4	3:45a	0.0	19.7	0.00	2.4	17.0	12:15p	SE
4	86.1	94.0	5:30p	77.3	6:30a	0.0	21.1	0.00	2.3	14.0	1:30p	SE
5	82.7	90.1	4:45p	74.8	6:00a	0.0	17.7	0.00	2.1	15.0	5:00p	N
6	81.3	89.5	6:30p	74.6	6:45a	0.0	16.3	0.00	2.4	11.0	3:00p	N
7	78.0	87.0	4:00p	69.8	6:15a	0.0	13.0	0.00	2.3	11.0	2:45p	E
8	78.0	90.8	4:00p	63.0	6:00a	0.2	13.2	0.00	1.8	13.0	2:45p	SE
9	81.3	92.4	4:45p	65.1	6:45a	0.0	16.3	0.00	1.4	14.0	12:45p	S
10	84.5	94.8	3:45p	71.9	6:30a	0.0	19.5	0.00	1.4	11.0	5:15p	NNE
11	87.2	98.2	4:15p	73.9	6:45a	0.0	22.2	0.00	1.6	12.0	2:15p	SE
12	87.9	99.2	2:00p	76.9	6:15a	0.0	22.9	0.00	1.4	21.0	3:00p	ENE
13	86.9	98.7	4:45p	76.5	12:00m	0.0	21.9	0.00	3.1	20.0	8:15p	SW
14	80.0	86.6	2:15p	74.3	5:30a	0.0	15.0	0.00	1.4	10.0	5:15a	ENE
15	82.7	91.3	4:45p	71.7	6:30a	0.0	17.7	0.00	1.6	13.0	3:30p	W
16	84.1	92.3	4:15p	75.4	6:45a	0.0	19.1	0.00	1.9	12.0	2:45p	N
17	75.7	80.3	12:15a	72.8	11:15p	0.0	10.7	0.49	1.7	13.0	5:00p	ENE
18	76.2	84.8	6:00p	70.3	9:30a	0.0	11.2	0.00	1.7	12.0	3:45p	E
19	83.2	97.0	3:00p	74.5	7:15a	0.0	18.2	0.00	2.6	27.0	4:45p	W
20	78.1	87.3	12:45p	70.1	6:00a	0.0	13.1	0.00	1.1	13.0	1:00p	NNW
21	78.4	88.3	5:00p	67.7	6:30a	0.0	13.4	0.00	2.3	15.0	11:00a	NNW
22	78.3	88.5	4:45p	68.1	5:45a	0.0	13.3	0.00	1.8	14.0	2:30p	N
23	76.3	85.2	7:00p	66.8	6:15a	0.0	11.3	0.00	1.5	12.0	4:15p	N
24	78.4	87.5	5:00p	69.4	6:45a	0.0	13.4	0.00	2.1	18.0	2:30p	N
25	77.4	90.4	1:45p	63.9	6:15a	0.1	12.4	0.00	1.3	9.0	11:00a	N
26	75.1	85.4	5:30p	66.8	10:00a	0.0	10.1	0.04	1.2	14.0	6:00p	NNW
27	74.8	85.0	5:30p	64.7	6:30a	0.0	9.8	0.00	1.3	12.0	3:15p	ENE
28	74.9	83.4	1:45p	68.2	6:00a	0.0	9.9	0.00	2.6	17.0	1:45p	ENE
29	70.5	76.0	6:45p	65.2	7:15a	0.0	5.5	0.77	2.2	13.0	4:15p	ENE
30	70.3	79.8	5:30p	62.6	12:00m	0.2	5.5	0.39	1.5	14.0	9:00p	ESE
31	72.0	83.7	4:00p	60.4	6:45a	1.1	8.0	0.01	1.2	17.0	4:30p	NW

	79.3	99.2	12	60.4	31	1.6	445.7	1.79	1.8	27.0	19	N

Max >= 90.0: 13
 Max <= 32.0: 0
 Min <= 32.0: 0
 Min <= 0.0: 0

Max Rain: 0.77 ON 07/29/18

Days of Rain: 5 (>.01 in) 3 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for AUG. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	76.1	87.8	2:00p	62.1	6:45a	0.2	11.3	0.00	0.9	9.0	3:00p	NE
2	80.7	93.7	5:00p	66.3	7:00a	0.0	15.7	0.00	2.0	16.0	10:45p	N
3	82.8	95.4	4:15p	68.5	6:45a	0.0	17.8	0.00	3.7	20.0	5:45p	S
4	81.7	91.7	2:00p	72.8	7:30a	0.0	16.7	0.08	4.1	24.0	1:45p	S
5	86.2	97.7	4:15p	74.9	5:45a	0.0	21.2	0.00	5.9	23.0	2:15p	S
6	84.8	96.5	6:30p	73.0	10:45p	0.0	19.8	0.00	3.5	17.0	9:15p	SW
7	76.5	86.8	6:00p	67.7	6:00a	0.0	11.5	0.53	1.6	17.0	2:00a	N
8	79.8	90.1	4:00p	68.1	7:00a	0.0	14.8	0.00	0.9	10.0	4:00p	NE
9	80.6	93.0	5:45p	70.0	6:00a	0.0	15.6	0.00	1.5	27.0	6:15p	SW
10	78.8	88.6	4:30p	68.8	5:30a	0.0	13.8	0.00	1.8	15.0	3:15p	N
11	78.7	89.0	2:15p	67.4	6:45a	0.0	13.7	0.00	1.2	9.0	4:00p	NW
12	79.8	91.3	4:00p	67.3	7:15a	0.0	14.8	0.00	1.8	13.0	3:15p	NNE
13	80.8	91.1	4:15p	71.6	6:45a	0.0	15.8	0.00	2.4	16.0	9:30p	ESE
14	74.0	80.9	2:15p	71.1	6:00p	0.0	9.0	0.54	1.1	22.0	4:15p	SE
15	76.9	84.5	1:45p	71.7	2:30a	0.0	11.9	0.00	0.8	11.0	4:00p	SSW
16	79.2	89.4	3:45p	70.4	6:45a	0.0	14.2	0.00	1.2	19.0	10:00p	N
17	77.8	86.2	6:45p	69.9	7:00a	0.0	12.8	0.00	1.7	15.0	11:30a	WNW
18	79.4	88.2	2:00p	68.5	7:00a	0.0	14.4	0.00	1.3	9.0	3:00p	N
19	73.7	78.3	12:00p	70.7	5:30p	0.0	8.7	1.87	1.0	17.0	4:15p	SE
20	68.4	73.5	11:15a	66.7	2:45a	0.0	3.4	0.24	5.0	27.0	1:15p	W
21	71.7	80.3	4:30p	63.1	7:00a	0.1	6.8	0.00	2.3	16.0	3:30p	NNW
22	69.0	76.9	3:30p	63.2	7:15a	0.3	4.3	0.00	0.9	7.0	1:45p	NE
23	67.4	77.4	6:00p	62.2	10:15a	0.8	3.1	0.71	2.0	23.0	4:30p	SSE
24	80.4	90.8	6:00p	68.5	1:15a	0.0	15.4	0.00	4.1	19.0	3:45p	S
25	85.0	96.1	3:30p	77.5	5:45a	0.0	20.0	0.00	4.9	19.0	6:00a	SW
26	84.4	93.3	4:15p	77.8	8:30a	0.0	19.4	0.00	5.7	27.0	8:15p	S
27	85.1	94.3	4:15p	75.9	6:30a	0.0	20.1	0.13	9.1	32.0	2:45p	S
28	82.8	93.1	2:30p	68.5	12:00m	0.0	17.8	0.00	6.7	29.0	10:00a	S
29	68.0	77.3	5:45p	59.9	7:30a	1.3	4.3	0.23	2.2	19.0	12:15a	ENE
30	71.6	78.9	5:30p	68.0	12:15a	0.0	6.6	0.17	2.1	19.0	5:15p	SE
31	77.9	90.6	6:00p	68.8	7:45a	0.0	12.9	0.00	4.2	21.0	5:45p	SE
	78.1	97.7	5	59.9	29	2.7	407.6	4.50	2.8	32.0	27	S

Max >= 90.0: 15

Max <= 32.0: 0

Min <= 32.0: 0

Min <= 0.0: 0

Max Rain: 1.87 ON 08/19/18

Days of Rain: 9 (>.01 in) 8 (>.1 in) 1 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for SEP. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	84.0	92.3	4:15p	76.6	8:00a	0.0	19.0	0.00	5.7	22.0	2:30a	S
2	78.8	88.9	3:15p	73.7	7:15p	0.0	13.8	0.03	2.6	16.0	10:15a	S
3	80.3	88.7	3:45p	74.1	1:30a	0.0	15.3	0.01	2.7	23.0	4:30p	S
4	78.4	85.3	11:45a	75.0	6:45a	0.0	13.4	0.16	3.4	27.0	12:15p	S
5	73.2	75.9	12:15a	70.8	12:00m	0.0	8.2	0.48	0.9	11.0	6:15a	S
6	70.3	73.2	2:15p	68.3	4:45a	0.0	5.3	0.02	1.8	10.0	2:15p	NNE
7	66.7	68.9	12:15a	63.8	9:00p	0.1	1.8	0.16	2.1	14.0	8:30p	NNE
8	64.8	69.5	3:45p	61.6	7:45a	1.2	1.0	0.01	2.4	15.0	5:15a	NNE
9	64.9	75.3	5:45p	56.1	7:15a	2.9	2.9	0.00	1.2	8.0	2:15p	N
10	67.7	80.0	4:45p	55.1	6:45a	2.7	5.4	0.01	0.7	9.0	4:45p	SW
11	70.7	82.4	3:30p	58.0	7:00a	1.4	7.1	0.00	1.8	17.0	4:30p	S
12	71.2	81.1	5:00p	61.6	6:00a	0.6	6.8	0.00	1.5	15.0	2:30p	SE
13	73.9	82.6	4:00p	66.4	6:15a	0.0	8.9	0.00	2.4	20.0	1:00p	S
14	78.4	90.0	5:45p	66.7	7:30a	0.0	13.4	0.00	1.6	16.0	1:00p	S
15	79.9	91.7	4:15p	68.0	7:15a	0.0	14.9	0.00	0.8	11.0	4:00p	SE
16	78.6	91.4	4:15p	67.0	7:00a	0.0	13.6	0.00	0.8	11.0	2:00p	ESE
17	79.5	91.7	4:15p	67.8	5:45a	0.0	14.5	0.00	1.5	14.0	5:15p	S
18	82.4	93.7	4:45p	71.9	6:15a	0.0	17.4	0.00	2.1	18.0	2:30p	S
19	82.6	94.2	4:15p	72.1	7:00a	0.0	17.6	0.00	2.3	21.0	3:45p	S
20	84.1	92.8	3:30p	73.2	12:00m	0.0	19.1	0.01	6.2	34.0	3:15p	S
21	65.9	73.2	12:15a	58.9	12:00m	0.9	1.8	0.17	2.8	19.0	12:00p	N
22	60.2	73.0	5:30p	48.8	7:15a	6.5	1.7	0.00	1.4	10.0	1:45a	NE
23	64.1	79.4	5:00p	49.8	7:45a	5.2	4.3	0.00	1.0	14.0	3:30p	SE
24	68.2	78.5	6:00p	58.9	2:15a	1.4	4.6	0.00	1.3	15.0	2:15p	S
25	65.1	76.9	1:00p	55.1	12:00m	1.8	2.0	0.00	2.5	21.0	2:00p	N
26	56.5	69.3	6:00p	47.8	7:00a	8.9	0.5	0.00	0.9	11.0	1:30p	NNW
27	58.9	73.2	4:30p	45.1	7:00a	7.9	1.8	0.00	1.8	18.0	1:00p	S
28	55.1	62.1	2:30p	49.5	6:15a	9.9	0.0	0.00	3.2	21.0	2:45p	NNE
29	56.7	68.3	9:30p	45.4	6:00a	9.1	0.8	0.10	2.0	15.0	12:15p	SE
30	68.4	74.7	3:30p	64.9	11:45a	0.0	3.4	0.00	1.7	14.0	2:45a	SW
	71.0	94.2	19	45.1	27	60.5	240.3	1.16	2.1	34.0	20	S

Max >= 90.0: 8
 Max <= 32.0: 0
 Min <= 32.0: 0
 Min <= 0.0: 0

Max Rain: 0.48 ON 09/05/18

Days of Rain: 7 (>.01 in) 4 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for OCT. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	68.3	80.3	4:15p	60.2	11:45p	0.7	4.0	0.00	3.6	23.0	9:45a	S
2	71.7	86.9	4:00p	58.5	8:00a	2.5	9.2	0.00	3.1	23.0	3:45p	S
3	79.9	90.3	4:30p	66.3	11:45p	0.0	14.9	0.24	8.8	40.0	3:00p	S
4	56.3	66.9	1:00a	48.5	10:00a	8.8	0.1	0.00	2.9	19.0	9:00a	N
5	63.4	78.0	8:15p	53.1	2:30a	5.0	3.3	0.00	0.7	12.0	3:45p	SE
6	53.8	68.0	12:15a	49.9	10:15p	11.2	0.1	1.40	2.2	17.0	2:15a	N
7	57.3	65.3	4:00p	50.3	12:15a	7.7	0.0	1.73	0.3	6.0	7:15a	NNE
8	67.9	79.0	4:00p	61.9	1:45a	0.3	3.2	1.73	1.4	19.0	5:00p	SE
9	66.5	71.7	2:45p	63.6	4:45a	0.2	1.7	1.74	2.0	18.0	4:30p	E
10	51.4	65.0	12:15a	45.9	12:00m	13.6	0.0	0.11	3.0	23.0	12:45p	W
11	45.7	54.6	5:30p	38.6	7:30a	19.3	0.0	0.00	1.7	15.0	1:45a	NNW
12	45.4	47.7	12:15a	43.9	8:15a	19.6	0.0	0.33	0.5	6.0	1:15p	ENE
13	49.0	56.6	4:00p	43.6	12:00m	16.0	0.0	0.00	0.9	9.0	10:00a	SSE
14	42.1	51.2	1:00p	32.6	11:30p	22.9	0.0	0.18	1.9	21.0	2:00p	N
15	37.3	46.8	5:30p	31.0	7:45a	27.7	0.0	0.04	1.7	13.0	10:30a	W
16	46.9	65.1	5:30p	31.3	5:45a	18.1	0.0	0.00	1.7	16.0	1:45p	W
17	53.1	67.4	3:15p	40.1	7:30a	12.1	0.2	0.00	0.9	13.0	4:00p	N
18	53.0	66.9	5:00p	38.8	7:45a	12.1	0.2	0.00	1.1	13.0	1:15p	SSE
19	58.2	68.0	5:45p	53.0	8:00a	7.1	0.2	0.00	3.2	21.0	1:30p	SW
20	53.2	63.2	3:00p	42.1	11:30p	11.8	0.0	0.00	2.8	28.0	12:30p	NNW
21	49.1	64.7	5:00p	34.5	6:30a	15.9	0.0	0.00	3.4	21.0	3:45p	S
22	56.7	72.4	4:15p	46.7	7:30a	9.3	1.0	0.00	1.0	13.0	12:15a	S
23	52.8	64.9	4:00p	44.3	11:30p	12.2	0.0	0.00	0.9	9.0	4:45p	NNE
24	50.1	62.7	3:00p	36.4	7:45a	14.9	0.0	0.00	1.0	12.0	2:30p	E
25	49.2	52.4	12:15a	46.7	11:00p	15.8	0.0	0.08	1.0	8.0	4:45p	N
26	49.4	58.2	4:30p	41.6	8:30a	15.6	0.0	0.01	0.9	9.0	11:45a	W
27	57.4	72.2	5:00p	44.4	8:15a	9.0	1.4	0.00	0.7	11.0	3:30p	WNW
28	56.9	66.1	3:45p	44.4	11:45p	8.2	0.1	0.00	2.3	21.0	11:45a	NNW
29	57.3	72.1	3:45p	42.7	6:15a	9.1	1.4	0.00	2.2	20.0	12:15p	SSE
30	58.3	64.3	1:00a	53.3	12:00m	6.7	0.0	0.00	2.2	16.0	7:30p	N
31	51.9	56.8	2:00p	46.6	7:45a	13.1	0.0	0.00	1.7	13.0	12:30a	N
	55.1	90.3	3	31.0	15	346.5	41.0	7.59	2.0	40.0	3	N

Max >= 90.0: 1
 Max <= 32.0: 0
 Min <= 32.0: 2
 Min <= 0.0: 0

Max Rain: 1.74 ON 10/09/18

Days of Rain: 10 (>.01 in) 8 (>.1 in) 4 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for NOV. 2018

NAME: Leavenworth City Hall CITY: Leavenworth STATE: Kansas
 ELEV: 851 ft LAT: 39° 18' 00" N LONG: 94° 54' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	50.5	51.6	9:15p	49.5	12:00m	1.8	0.0	0.00	3.4	13.0	11:45p	SW
2	48.6	51.1	5:15p	42.0	11:15p	16.4	0.0	0.00	1.7	18.0	10:30a	W
3	50.4	59.4	2:00p	42.1	12:15a	14.6	0.0	0.17	1.7	20.0	11:15a	SE
4	44.6	50.9	12:15a	39.2	12:00m	20.4	0.0	0.01	2.3	17.0	8:00a	W
5	46.4	52.9	5:00p	39.0	12:15a	18.6	0.0	0.26	1.8	13.0	10:15p	W
6	43.4	50.0	1:30p	35.7	12:00m	21.6	0.0	0.00	2.4	18.0	1:00a	W
7	38.0	45.0	3:00p	32.8	12:00m	27.1	0.0	0.00	1.5	12.0	9:15a	NNW
8	31.2	34.9	1:30p	28.1	5:45a	33.8	0.0	0.09	0.9	7.0	8:45a	NNE
9	26.8	33.1	10:15a	16.3	12:00m	38.2	0.0	0.00	2.9	25.0	12:15p	W
10	25.3	37.3	4:00p	13.2	6:15a	39.7	0.0	0.00	2.6	24.0	2:15p	SSE
11	35.5	46.8	2:45p	25.2	12:30a	29.5	0.0	0.00	1.9	22.0	8:45p	N
12	26.5	30.9	12:15a	19.7	12:00m	38.5	0.0	0.00	5.3	23.0	11:45a	N
13	23.1	34.6	4:00p	14.0	6:45a	41.9	0.0	0.00	1.7	12.0	1:15p	NW
14	29.3	40.1	3:45p	19.5	3:45a	35.7	0.0	0.00	0.5	7.0	3:30p	SE
15	36.2	50.2	3:15p	23.4	7:00a	28.8	0.0	0.00	1.6	15.0	11:30a	S
16	45.3	56.5	4:00p	32.3	7:30a	19.7	0.0	0.00	0.9	10.0	2:30p	SSE
17	35.8	41.7	9:00a	27.0	12:00m	29.2	0.0	0.00	4.8	25.0	12:30p	N
18	28.0	37.1	3:30p	22.9	9:00a	37.0	0.0	0.00	1.8	17.0	12:45a	NNW
19	33.3	42.8	4:00p	25.7	5:15a	31.7	0.0	0.00	1.8	13.0	1:45p	NNW
20	34.3	45.2	4:15p	21.7	7:15a	30.7	0.0	0.00	1.8	16.0	2:45p	S
21	47.9	61.1	3:30p	35.1	7:30a	17.1	0.0	0.00	2.4	17.0	3:30p	S
22	49.9	62.5	3:00p	37.8	7:15a	15.1	0.0	0.00	4.7	22.0	11:15p	S
23	49.8	52.8	2:30p	45.4	11:45p	15.2	0.0	0.00	3.9	28.0	12:15p	S
24	49.1	60.4	3:30p	36.8	7:30a	15.9	0.0	0.00	0.9	11.0	11:15p	E
25	33.3	52.0	12:15a	21.3	12:00m	31.7	0.0	0.30	6.0	35.0	11:45a	N
26	23.1	27.5	7:45p	16.8	7:30a	41.9	0.0	0.00	2.7	14.0	1:15p	N
27	20.8	26.0	12:15a	15.3	7:45a	44.2	0.0	0.00	2.3	13.0	2:15a	NNW
28	28.4	36.9	2:45p	18.1	12:45a	36.6	0.0	0.00	2.0	12.0	12:00p	ESE
29	34.0	44.5	3:15p	25.7	3:30a	31.0	0.0	0.00	0.7	8.0	3:45p	NNE
30	34.3	40.3	12:00m	27.5	7:15a	30.7	0.0	0.14	2.4	13.0	11:00p	ENE

	36.8	62.5	22	13.2	10	834.3	0.0	0.97	2.4	35.0	25	N

Max >= 90.0: 0

Max <= 32.0: 3

Min <= 32.0: 18

Min <= 0.0: 0

Max Rain: 0.30 ON 11/25/18

Days of Rain: 5 (>.01 in) 4 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for DEC. 2018

NAME: City Hall CITY: STATE:
 ELEV: 0 ft LAT: LONG:

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	43.5	51.4	11:00a	35.8	11:00p	21.5	0.0	0.83	4.0	26.0	1:00p	SW
2	34.1	36.5	1:00a	30.0	12:00m	30.9	0.0	0.00	4.8	18.0	6:30a	W
3	28.0	30.0	12:15a	26.6	12:00m	37.0	0.0	0.01	3.3	14.0	5:45a	NNW
4	27.2	29.8	8:30p	24.7	9:00a	37.8	0.0	0.00	2.3	12.0	1:45p	W
5	36.0	46.2	2:45p	26.0	7:15a	29.0	0.0	0.00	2.9	15.0	1:45p	W
6	30.0	40.0	12:15a	20.7	12:00m	35.0	0.0	0.00	3.4	15.0	11:00a	N
7	24.3	30.9	3:00p	18.3	7:45a	40.7	0.0	0.00	1.5	8.0	2:15a	ENE
8	26.2	35.3	3:00p	18.6	7:45a	38.8	0.0	0.00	1.9	12.0	2:15p	ENE
9	25.4	36.7	3:30p	14.9	7:30a	39.6	0.0	0.00	0.2	4.0	12:00p	NE
10	30.3	43.5	3:45p	17.9	6:15a	34.7	0.0	0.00	0.8	13.0	2:00p	SW
11	40.1	52.8	2:45p	28.1	4:30a	24.9	0.0	0.00	3.1	23.0	3:45p	S
12	39.9	52.8	2:30p	30.2	6:00a	25.1	0.0	0.00	1.2	9.0	12:15a	W
13	38.6	43.2	3:45a	34.5	11:15p	26.4	0.0	0.00	2.7	15.0	1:30p	NNW
14	37.2	46.2	3:15p	30.1	11:45p	27.8	0.0	0.00	3.0	19.0	3:30a	N
15	38.1	54.3	2:00p	26.7	7:00a	26.9	0.0	0.00	0.3	6.0	7:30a	NW
16	39.2	55.0	3:00p	27.4	7:45a	25.8	0.0	0.00	0.6	12.0	3:15p	NW
17	38.5	55.7	3:15p	26.5	8:00a	26.5	0.0	0.00	0.3	5.0	12:00p	SSE
18	43.5	57.6	2:00p	28.7	6:15a	21.5	0.0	0.00	1.7	19.0	12:45p	S
19	45.2	48.3	12:15a	42.7	8:15a	19.8	0.0	0.00	3.0	19.0	11:45a	S
20	38.7	43.8	12:15a	33.2	9:45p	26.3	0.0	0.00	4.2	29.0	1:45p	NNW
21	35.6	46.1	3:00p	28.7	7:15a	29.4	0.0	0.00	1.1	11.0	10:15a	NNW
22	38.8	46.4	3:45p	31.1	12:15a	26.2	0.0	0.00	1.4	13.0	3:45p	NNW
23	39.1	47.9	4:00p	29.6	7:00a	25.9	0.0	0.00	1.3	13.0	3:15p	W
24	39.3	46.1	2:30p	31.0	7:45a	25.7	0.0	0.00	1.6	17.0	8:15p	S
25	42.1	50.9	2:45p	33.3	8:00a	22.9	0.0	0.00	0.9	8.0	2:45p	ENE
26	42.9	49.5	12:00m	38.9	2:15a	22.1	0.0	1.08	2.1	18.0	8:00p	ESE
27	45.0	56.0	12:15p	25.6	12:00m	20.0	0.0	0.18	6.2	36.0	5:15a	W
28	22.5	25.8	12:15a	16.4	11:15p	42.5	0.0	0.00	4.2	15.0	12:30a	NNW
29	21.2	26.8	4:00p	16.8	12:15a	43.8	0.0	0.00	1.3	10.0	12:45p	SW
30	31.3	42.5	2:45p	20.7	2:30a	33.7	0.0	0.00	3.8	21.0	12:15p	S
31	33.8	38.7	12:15a	20.8	12:00m	31.2	0.0	0.56	3.8	24.0	5:45p	WNW
	35.3	57.6	18	14.9	9	919.4	0.0	2.66	2.4	36.0	27	NNW

Max >= 90.0: 0
 Max <= 32.0: 5
 Min <= 32.0: 25
 Min <= 0.0: 0

Max Rain: 1.08 ON 12/26/18

Days of Rain: 4 (>.01 in) 4 (>.1 in) 1 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

THREE-MILE CREEK EAST LOOKING EAST (DOWNSTREAM)

MARCH 19



JUNE 2



JUNE 19



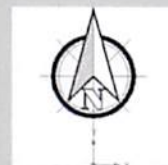
AUGUST 7



AUGUST 19



OCTOBER 8



2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

THREE-MILE CREEK EAST LOOKING WEST (UPSTREAM)

MARCH 19



JUNE 2



JUNE 19



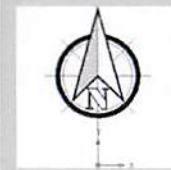
AUGUST 7



AUGUST 19



OCTOBER 8



2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

THREE-MILE CREEK WEST LOOKING EAST (DOWNSTREAM)

MARCH 19



JUNE 2



JUNE 19



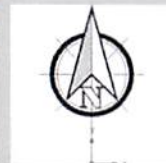
AUGUST 7



AUGUST 19



OCTOBER 8



2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

THREE-MILE CREEK WEST LOOKING WEST (UPSTREAM)

MARCH 19



JUNE 2



JUNE 19



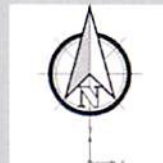
AUGUST 7



AUGUST 19



OCTOBER 8



2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

FIVE-MILE CREEK EAST LOOKING EAST (DOWNSTREAM)

MARCH 19



JUNE 2



JUNE 19



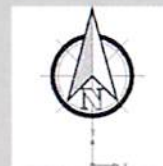
AUGUST 7



AUGUST 19



OCTOBER 8



2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

FIVE-MILE CREEK EAST LOOKING WEST (UPSTREAM)

MARCH 19



JUNE 2



JUNE 19



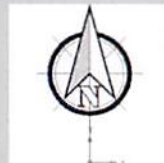
AUGUST 7



AUGUST 19



OCTOBER 8



2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

FIVE-MILE CREEK WEST LOOKING EAST (DOWNSTREAM)

MARCH 19



JUNE 2



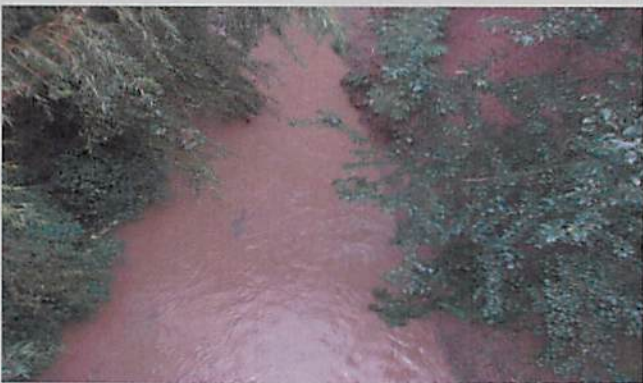
JUNE 19



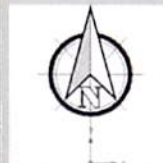
AUGUST 7



AUGUST 19



OCTOBER 8



2018 STORM EVENTS: THREE- AND FIVE-MILE CREEKS, LEAVENWORTH, KS

FIVE-MILE CREEK WEST LOOKING WEST (UPSTREAM)

MARCH 19



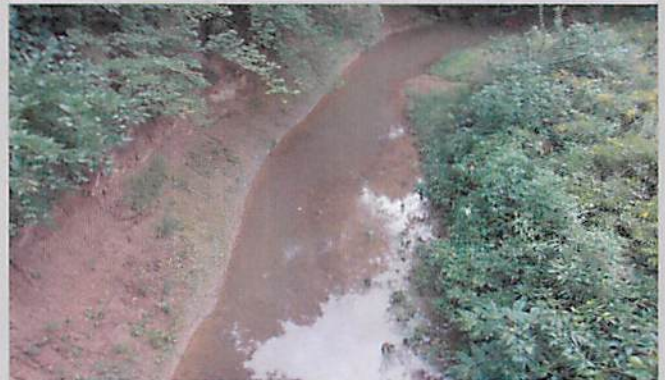
JUNE 2



JUNE 19



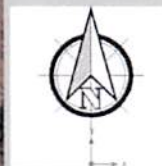
AUGUST 7



AUGUST 19



OCTOBER 8



City of Leavenworth
2018 Stormwater Sampling Summary

 = Water Quality Improvement
 = Reduced or No Change in Water Quality

	Upstream		Downstream		Upstream		Downstream		Upstream		Downstream		Upstream		Downstream	
	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)
Date	March 19 2018		June 2 2018		June 19 2018		August 7 2018		August 19 2018		October 8 2018					
KDHE ID	003B6	003A6	003B6	003A6	003B6	003A6	003B6	003A6	003B6	003A6	003B6	003A6	003B6	003A6		
Time	11:38 AM	11:16 AM	10:07 AM	9:11 AM	2:21 PM	1:59 AM	8:44 AM	8:27 AM	7:35 PM	7:17 PM	9:40 AM	9:14 AM				
Three-Mile Creek	CFS															
Total Phosphorus	0.44	0.33	0.24	0.38	1.1	0.84	0.14	0.17	1.2	1.7	0.56	0.29				
Ortho Phosphate	0.12	ND	0.31	0.55	0.42	0.31	0.12	0.12	0.16	0.36	0.39	0.23				
Nitrate+Nitrite	0.49	0.38	0.74	0.93	1.2	0.9	0.35	0.63	0.89	0.64	1.1	0.72				
Total Kjeldahl Nitrogen	2.3	2.7	1.3	1.9	2	2.5	1.4	1.2	3.3	4.5	1.1	0.74				
Total Suspended Solids	374	480	67.5	287	488	400	23	50.3	897	1760	266	86.8				
Turbidity	121	57	77.5	386	675	318	31.5	53.5	1120	1200	265	77.5				
E.Coli	1340	3590	6970	15650	43520	104620	81600	65700	21420	14500	10710	9080				

Three-Mile Creek - 6 Events 2018		
	Better	Worse
Total Phosphorus	3	3
Ortho Phosphate	4	2
Nitrate+Nitrite	4	2
Total Kjeldahl Nitrogen	2	4
Total Suspended Solids	2	4
Turbidity	3	3
E.Coli	3	3
Total	21	21

	Upstream		Downstream		Upstream		Downstream		Upstream		Downstream		Upstream		Downstream	
	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)	(West)	(East)
Date	March 19 2018		June 2 2018		June 19 2018		August 7 2018		August 19 2018		October 8 2018					
KDHE ID	005B6	005A6	005B6	005A6	005B6	005A6	005B6	005A6	005B6	005A6	005B6	005A6	005B6	005A6		
Time	11:58 AM	12:17 PM	9:49 AM	9:29 AM	2:40 PM	3:00 PM	9:04 AM	9:23 AM	7:52 PM	8:09 PM	9:57 AM	10:18 AM				
Five-Mile Creek	CFS															
Total Phosphorus	0.14	0.57	0.19	0.38	0.37	0.71	ND	0.15	1.1	0.87	0.48	0.33				
Ortho Phosphate	ND	0.12	ND	0.61	0.18	0.3	ND	1.6	0.28	0.21	0.35	0.25				
Nitrate+Nitrite	0.35	0.41	0.45	2	0.36	0.44	0.27	0.37	0.42	0.5	0.83	0.77				
Total Kjeldahl Nitrogen	0.66	1.9	1	2.7	1.1	2.3	0.53	1.5	3.6	2.2	1.4	1.4				
Total Suspended Solids	156	748	170	578	127	678	37.1	224	1020	1100	138	154				
Turbidity	52	119	175	576	109	678	30.9	186	910	775	158	121				
E.Coli	310	3320	8840	14210	16160	48840	2481	24196	50120	17850	9580	14830				

Five-Mile Creek - 6 Events 2018		
	Better	Worse
Total Phosphorus	2	4
Ortho Phosphate	2	4
Nitrate+Nitrite	1	5
Total Kjeldahl Nitrogen	2	4
Total Suspended Solids	0	6
Turbidity	2	4
E.Coli	1	5
Total	10	32

City of Leavenworth 2014-2018 Summary

Three-Mile & Five-Mile Creeks Storm Events Data

Three-Mile Creek										
	2014-4 Events		2015-6 Events		2016-6 Events		2017-5 Events		2018-6 Events	
	NC/Better	Worse	NC/Better	Worse	NC/Better	Worse	NC/Better	Worse	NC/Better	Worse
Total Phosphorus	1	3	1	5	0	6	0	5	3	3
Ortho Phosphate	0	2	3	3	2	4	1	4	4	2
Nitrate+Nitrite	2	2	2	4	3	3	1	4	4	2
Total Kjeldahl Nitrogen	2	2	3	3	0	6	1	4	2	4
Total Suspended Solids	3	1	3	3	0	6	1	4	2	4
Turbidity	4	0	2	4	2	4	1	4	3	3
E.Coli			0	6	0	6	1	4	3	3
Total	12	10	14	28	7	35	6	29	21	21

Five-Mile Creek										
	2014- 4 Events		2015-6 Events		2016-6 Events		2017-5 Events		2018-6 Events	
	NC/Better	Worse	NC/Better	Worse	NC/Better	Worse	NC/Better	Worse	NC/Better	Worse
Total Phosphorus	3	1	2	4	2	4	0	5	2	4
Ortho Phosphate	2	0	5	1	3	3	1	4	2	4
Nitrate+Nitrite	0	4	0	6	3	3	1	4	1	5
Total Kjeldahl Nitrogen	4	0	4	2	1	5	2	3	2	4
Total Suspended Solids	2	2	2	4	2	4	2	3	0	6
Turbidity	2	2	3	3	3	3	2	3	2	4
E.Coli			5	1	3	3	1	4	1	5
Total	13	9	21	21	17	25	9	26	10	32

City of Leavenworth 2017 Stormwater Sampling Summary

 = decrease in Water Quality
 = increase or No Change in Water Quality

	KDHE ID	March 29 2017		April 5 2017		July 27 2017		August 5 2017		October 22 2017	
		Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)
Three Mile Creek	CFS	51	24	52	98	5	<1	<1	0	12	24
Total Phosphorus	mg/l	0.25	0.86	0.21	0.43	0.29	0.41	0.23	0.21	ND	0.27
Ortho Phosphate	mg/l	0.1	0.21	0.2	0.33	0.17	0.27	0.16	0.14	ND	0.3
Nitrate+Nitrite	mg/l	0.62	0.9	0.99	0.67	0.5	1.2	0.53	0.55	0.3	1
Total Kjeldahl Nitrogen	mg/l	0.76	2.5	0.84	1.4	1.2	2.2	0.56	ND	1	1.2
Total Suspended Solids	mg/l	185	488	116	132	56	159	62	33	41.3	47
Turbidity	NTU	155	434	107	134	50.9	67.2	58.6	30.5	38.3	56.6
E.Coli	col/100ml	4106	4352	1460	6130	8164	6867	4730	9870	2410	5810
<i>potable TSS meter</i>	<i>at time of sampling</i>	420	960	290	1870	170	380	180	110	110	170
	<i>later few hours</i>	240	210	140	150	50	110				

	KDHE ID	March 29 2017		April 5 2017		July 27 2017		August 5 2017		October 22 2017	
		Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)	Upstream (West)	Downstream (East)
Five Mile Creek	CFS	129	112	274	360	17	33	3	36	12	32
Total Phosphorus	mg/l	0.36	0.66	0.18	0.29	0.23	0.28	0.13	0.16	0.15	0.2
Ortho Phosphate	mg/l	0.19	0.14	0.24	0.3	0.1	0.15	ND	ND	0.17	0.22
Nitrate+Nitrite	mg/l	1	1	0.25	0.35	0.44	0.57	0.37	0.19	0.42	0.66
Total Kjeldahl Nitrogen	mg/l	1.9	2.6	0.98	0.89	1.1	1.1	ND	4.5	0.96	1.2
Total Suspended Solids	mg/l	270	994	162	336	92	81	68	35.5	30	83.2
Turbidity	NTU	252	855	296	222	63.2	77.3	47	33	4.4	7.5
E.Coli	col/100ml	31800	55600	6630	8200	4352	5475	6090	24810	8360	7980
<i>potable TSS meter</i>	<i>at time of sampling</i>	630	2610	410	520	260	250	190	120	170	280
	<i>later few hours</i>	300	300	230	270	130	120				

City of Leavenworth
2017 Stormwater Sampling Summary (2014-2017)

(Note - in calculating CFS - the rating curve was used rather than the observed velocities)
 Page 2 of 2

2015		May 5 2015		May 14 2015		June 9 2015		July 20 2015		October 31 2015		November 5 2015						
		West	East	West	East	West	East	West	East	West	East	West	East					
		Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream					
Three Mile Creek	CFS	300	190	40	45	1300	750	45	N/A (1)	30	0	500	140					
Total Phosphorus	mg/l	0.14	0.24	w	0.15	0.23	w	1.2	2.8	w	0.34	0.38	b	0.39	0.42	w	2.4	0.39
Ortho Phosphate	mg/l	ND	ND	w	ND	ND	w	0.11	0.11	w	0.12	0.11	b	0.18	0.24	w	0.11	0.38
Nitrate+Nitrite	mg/l	0.39	0.94	w	0.27	0.37	w	0.27	0.33	w	0.39	0.61	w	0.4	0.35	b	0.47	0.31
Total Kjeldahl Nitrogen	mg/l	0.88	1.5	w	0.81	0.88	w	3	6.3	w	1.3	0.7	b	0.77	0.7	b	31.1	ND
Total Suspended Solids	mg/l	90	98	w	60	51	w	1180	1570	b	322	157	b	38	41	w	2970	402
Turbidity	NTU	87.3	117	w	47.4	57	w	604	1380	b	273	300	b	8.8	10.2	w	1370	69.3
E.Coli	col/100ml	2347	1871	w	886	9090	w	12977	88706	w	20480	19549	w	3448	1172	w	N/A(1)	42000

Three Mile Creek - 6 event 2015		
	NC/Better	Worse
Total Phosphorus	1	5
Ortho Phosphate	3	3
Nitrate+Nitrite	2	4
Total Kjeldahl Nitrogen	3	3
Total Suspended Solids	3	3
Turbidity	2	4
E.Coli	0	6

2015		May 5 2015		May 14 2015		June 9 2015		July 20 2015		October 31 2015		November 5 2015						
		West	East	West	East	West	East	West	East	West	East	West	East					
		Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream					
Five Mile Creek	CFS	30	150	35	150	130	190	30	N/A (1)	30	135	35	600					
Total Phosphorus	mg/l	0.18	0.34	w	0.29	0.13	b	0.47	0.19	b	0.14	0.13	b	0.19	0.60	w	2	4
Ortho Phosphate	mg/l	ND	ND	w	ND	ND	w	0.11	0.14	w	0.15	0.1	b	0.14	0.14	w	0.13	0.15
Nitrate+Nitrite	mg/l	0.22	0.46	w	0.17	0.23	w	0.21	0.21	w	0.42	0.47	w	ND	0.19	w	0.13	0.24
Total Kjeldahl Nitrogen	mg/l	1.3	2.1	w	1.3	0.84	b	7.8	4.8	w	1.8	0.69	b	0.54	ND	b	0.5	12.3
Total Suspended Solids	mg/l	113	165	w	130	65	b	1545	2131	w	480	731	b	11	25	w	49	392
Turbidity	NTU	146	291	w	100	28.5	b	1660	1729	b	454	134	b	5.3	13.1	w	27.2	138
E.Coli	col/100ml	12997	17339	w	13800	7540	b	90900	52120	b	77020	61138	b	1421	2613	w	19813	2851

Five-Mile Creek - 6 event 2015		
	NC/Better	Worse
Total Phosphorus	2	4
Ortho Phosphate	5	1
Nitrate+Nitrite	0	6
Total Kjeldahl Nitrogen	4	3
Total Suspended Solids	2	4
Turbidity	3	3
E.Coli	5	1

(1) Missouri River backed up

2014		April 24 2014		May 12 2014		October 1 2014		October 2 2014										
		Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream									
		Three Mile Creek	CFS	200	190	200	190	200	190	45	750							
Total Phosphorus	mg/l	0.12	0.55	w	0.42	0.61	w	1.5	0.79	b	0.6	0.60	w	0.19	0.19	w	0.16	0.19
Ortho Phosphate	mg/l	ND	ND	w	ND	ND	w	0.13	0.14	w	0.13	0.1	w	0.12	0.1	w	0.1	0.1
Nitrate+Nitrite	mg/l	0.5	0.42	b	0.89	0.69	w	0.54	0.57	w	0.8	0.71	w	0.8	0.71	w	0.8	0.71
Total Kjeldahl Nitrogen	mg/l	1	1.1	w	1	2.4	b	2.8	2.8	b	2.1	2.3	w	2.1	2.3	w	2.1	2.3
Total Suspended Solids	mg/l	303	742	b	165	440	w	1170	509	b	480	447	b	480	447	b	480	447
Turbidity	NTU	294	817	b	276	274	w	530	240	b	313	237	b	313	237	b	313	237
E.Coli	col/100ml	12997	3448	b	10500	24100	w	13583	72700	w	5206	17800	w	5206	17800	w	5206	17800
Dissolved Oxygen	mg/l	6.3	3.1	w	6.3	4.6	w	6.3	4.6	w	6.3	4.6	w	6.3	4.6	w	6.3	4.6

Three Mile Creek - 4 event 2014		
	NC/Better	Worse
Total Phosphorus	1	3
Ortho Phosphate	0	7
Nitrate+Nitrite	2	2
Total Kjeldahl Nitrogen	2	2
Total Suspended Solids	3	1
Turbidity	4	0
E.Coli	1	0

2014		April 28 2014		May 17 2014		October 5 2014		October 2 2014										
		Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream									
		Five Mile Creek	CFS	1020	800	880	660	1100	830	1100	265							
Total Phosphorus	mg/l	0.13	0.54	w	0.34	0.28	b	0.65	0.81	b	1.5	1.1	b	1.5	1.1	b	1.5	1.1
Ortho Phosphate	mg/l	ND	ND	w	ND	ND	w	0.2	0.19	b	0.24	0.21	b	0.24	0.21	b	0.24	0.21
Nitrate+Nitrite	mg/l	0.69	0.34	w	0.29	0.37	w	0.3	0.5	w	0.32	0.41	w	0.32	0.41	w	0.32	0.41
Total Kjeldahl Nitrogen	mg/l	0.69	0.34	w	1.8	1.4	w	1.3	1.3	b	4.4	3.1	b	4.4	3.1	b	4.4	3.1
Total Suspended Solids	mg/l	54	485	w	300	224	b	356	477	w	1510	1490	b	1510	1490	b	1510	1490
Turbidity	NTU	22.5	281	w	199	199	b	241	243	w	488	436	b	488	436	b	488	436
E.Coli	col/100ml	1872	3155	w	8460	8640	w	84600	20900	b	63100	59100	b	63100	59100	b	63100	59100
Dissolved Oxygen	mg/l	6.7	4.9	w	6.5	5.1	w	6.5	5.1	w	6.5	5.1	w	6.5	5.1	w	6.5	5.1

Five-Mile Creek - 4 event 2014		
	NC/Better	Worse
Total Phosphorus	3	1
Ortho Phosphate	2	0
Nitrate+Nitrite	0	4
Total Kjeldahl Nitrogen	4	0
Total Suspended Solids	2	2
Turbidity	2	2
E.Coli	1	0

Appendix B

TMDL

N/A

No TMDL monitoring required. Stream monitoring information included in Report Section F, Appendix A and Appendix C, and submitted to KDHE electronically.

Appendix C

- Comments on
 - Sampling Rising Streams
 - Measuring Stream Volume
 - Detention Basin Effectiveness
- Notes and Summary on Keeping Domes Clear
- Copy of Kansas City Urban Stormwater Conference Presentation

Commentary of Water Quality Sampling and Stream Flow Monitoring

These topics have been addressed in previous reports. There is some additional information from 2018 included in this report.

1. Difficulty in obtaining samples in the rising stream

The City has conducted a sampling program each year since 2014 as part of the MS4 permit. It is understood that KDHE and the City are interested in determining the impact of City activity on quality of water flowing through the City.

It has been difficult to have the sampling team obtain samples from a rising stream stage of both Three-Mile and Five-Mile Creeks. The graphs in this appendix in the 2017 report of Three-Mile and Five-Mile Creeks show the rapid rise and fall of the water surface elevation and sampling time. It is clear that it is nearly impossible to meet the requirements of sampling a rising stream.

The City has not invested in permanent monitors for stream sampling or level monitoring. Staff has become more efficient in obtaining samples although meeting the target of a “rising stream” continues to be difficult.

Other focus items for 2018 included:

- Follow-up measurements of detention basin effectiveness. This had the result of a paper being presented at the 2019 Kansas City Urban Stormwater Conference relating that small-to medium-sized detention basins general do not function as expected by the owners or as designed by the engineers.
- Evaluation of maintenance effort of the dome inlets continue to show that “clogging” is an issue in high-volume runoff areas with leafy vegetation (trees) throughout the year.

2. Difficulty in measuring streamflow (volume)

The City has conducted several years of sampling effort as part of the MS4 permit. Accuracy of the manual flow volume calculations is a concern. An engineering firm was contracted to provide Stage-Discharge Curves for all sampling locations. Flow data for 2017 and 2018 was calculated from observed velocities and an assumed channel width due to general inaccuracy of any other method.

3. Detention Basin Concerns (new thoughts for 2018)

A brief review of several detention basin charts from earlier measurements show many of the early designed basins pass a lot of water through very quickly. Discussions with design professionals indicated that these were an early design that basically allowed for storage and

release of the design storm; typically a “100-year” event. They work fine to mitigate that and are simple to construct. They do very little mitigation of water quality and water quantity on smaller storms, and smaller storms are the most damaging to creek banks and other erosion potential areas.

This is a region-wide and industry-wide issue. Staff has interacted with members of the APWA 5600 committee that modifies design regulations. They have acknowledged the problem and are attempting to make changes in the design guidelines in 2019 to address this.

See the PowerPoint presentation for more detail.

February 22, 2019

Observations on Domes in Bio-Swales

McDonald

City has constructed two projects with domes to restrict inflow into bio-swales. In general – the domes perform well for that purpose. There are concerns that they tend to “clog” easily with tree leaves and other debris generated from pollination trees. It has been necessary to have an aggressive maintenance schedule to ensure that they reliably function during rain events.

City expects to use this system for future projects. These future projects should include consideration of the following:

1. Use of the domes in areas with mature trees increases maintenance and decreases reliability
2. Use of the domes in small detention areas increases the issues noted in #1.
3. Routine maintenance is critical to the success of this type of system – the trick is to select an appropriate interval and ensure it is performed

Colette Kiszka

From: Donald W. Baker <dbaker@wrs-rc.com>
Sent: Tuesday, May 22, 2018 8:17 AM
To: Michael Stephan
Cc: Becky Beaver; Mike McDonald; Mike Hooper; Curtis Marks; Justin Stewart; Colette Kiszka
Subject: Re: Domes on Kickapoo

Thanks, Mike. The swale designed from the inlet on Kickapoo to the open channel section will carry the 100-year so house flooding should not be an issue.

On Tue, May 22, 2018 at 8:08 AM, Michael Stephan <mstephan@firstcity.org> wrote:

To All:

I met Dennis on-site to investigate the Domes.

The bulk of the debris is tree buds, seeds, etc..
When picking up the material, it feels a lot like peat moss.

There is some granite particles from the street.

There is some silt, not from any construction or exposed site.

This is coming from dirt from vehicles on the street.

Also from sparsely seeded lawns in which silt is gathered during high flow run-off.

At the present, the Domes will have to be kept clear of all debris.

The streets will have to be kept swept, especially following a rain event.

If the street debris, silt, etc. is not removed, then it will just enter the Domes during the next rain event.

We will need to document the work that is being done for maintenance.

This information will be used for our EPA reports as well as assessing the functionality of the design.

The help with the house at 733 Kickapoo Street, we need to look at possibly lifting the chain link fence to alleviate trapping

so much debris, which in turn causes run-off to move east to circumvent the fence and short rock head wall.

The other possibility is to remove or cut down a wider opening across the top of this headwall.

The other street locations, we will just have to really monitor.

The system as designed seems to handle the low flows pretty well if the Domes are clear.

It really is during those short term bursts of rainfall (high flows) that result in the issues.

Thanks,

Mike S.

Mike Stephan

Project Manager

City of Leavenworth

100 North 5th Street

Leavenworth, Kansas 66048

Office: 913-684-0392

Cell: 913-547-2166

Fax: 913-684-1521

mstephan@firstcity.org

From: Becky Beaver

Sent: Monday, May 21, 2018 3:07 PM

To: Mike McDonald; Mike Hooper; Michael Stephan

Cc: Curtis Marks

Subject: Re: Domes on Kickapoo

Mike Stephens is going to meet Dennis now so he can explain where the dirt is coming from.

Sent from my T-Mobile 4G LTE Device



----- Original message -----

From: Mike McDonald <MMcDonald@firstcity.org>

Date: 5/21/18 2:50 PM (GMT-06:00)

To: Becky Beaver <BBeaver@firstcity.org>, Mike Hooper <mhooper@firstcity.org>, Michael Stephan <mstephan@firstcity.org>

Cc: Curtis Marks <camarks@firstcity.org>

Subject: RE: Domes on Kickapoo

If it is dirt – where is it coming from?

Mike



From: Becky Beaver
Sent: Monday, May 21, 2018 2:48 PM
To: Mike McDonald; Mike Hooper; Michael Stephan
Cc: Curtis Marks
Subject: RE: Domes on Kickapoo

A little bit of both.

Becky Beaver

Street Foreman

City of Leavenworth

90 Thornton St.

Leavenworth, KS. 66048

Office: (913) 758-6615

Cell: (913) 306-2853

bbeaver@firstcity.org

From: Mike McDonald
Sent: Monday, May 21, 2018 2:02 PM
To: Becky Beaver; Mike Hooper; Michael Stephan
Cc: Curtis Marks
Subject: RE: Domes on Kickapoo

Becky – what is the make-up of the debris? Is it leaf things from the trees or dirt washing in?

Mike

From: Becky Beaver
Sent: Monday, May 21, 2018 12:18 PM
To: Mike McDonald; Mike Hooper; Michael Stephan
Cc: Curtis Marks
Subject: Domes on Kickapoo

Good Afternoon,

I put a video on the K drive that Stormwater took this morning. It was too big to email. It is not in a folder and it is labeled "Domes on Kickapoo".



Thanks.

Becky Beaver

Street Foreman

City of Leavenworth

790 Thornton St.

Leavenworth, KS. 66048


Office: (913) 758-6615

Cell: (913) 306-2853

bbeaver@firstcity.org



***The message and documents transmitted with this e-mail contain confidential or privileged information belonging to the sender and it is intended only for the individual or entity to whom it is addressed. Unauthorized use of this communication is strictly prohibited and may be unlawful. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message and any attachments. ***

--
onald W. Baker, P.E., D. WRE, AVS, CPESC
Principal & Owner
Water Resources Solutions, LLC

**Does Your Detention Pond
Actually Function as Designed?**

Or

Is your pond successful?

KC Urban Stormwater Conference

February 5th, 2019

Michael G. McDonald, PE

City of Leavenworth

Does Your Detention Pond Actually Function as Designed?

Or

Is your pond successful?

KC Urban Stormwater Conference

February 5th, 2019

Michael G. McDonald, PE

City of Leavenworth

2/19/2019

1

Definition of Success

It has been said by many that determining how successful your pond is –

- is a function of how many calls you get or don't get after it rains!
- is often defined as meeting the minimum criteria at the lowest cost for the client.

2/19/2019

2

How Should Success be defined?

We suggest the following be considered besides "meeting the regulations":

- Does the pond perform as envisioned by the Owner?
- Does the pond perform as designed by the Engineer?

2/19/2019

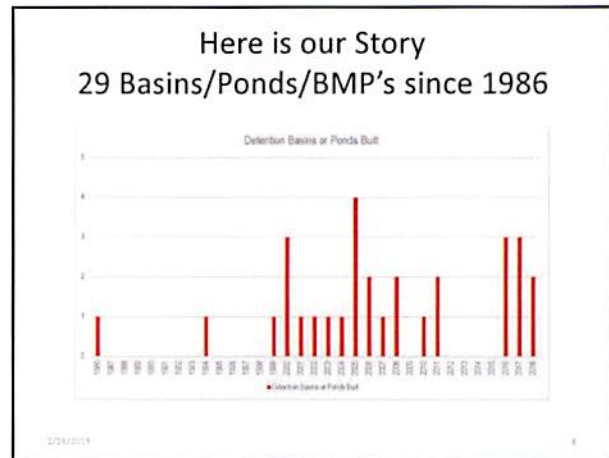
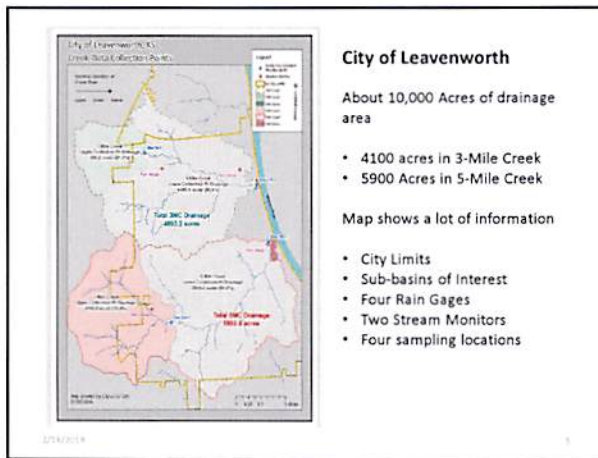
3

Who is Successful?

- I can tell you from our experience that very few agencies, entities, designers or firms can meet this definition of success on the normal sized development related detention ponds built in the KC Metro Area, and it is likely the same in most other areas of the Country.

2/19/2019

4



What Problem are we Solving with Ponds?

- Regulatory agencies focus on Water **QUALITY**
- Citizens and Elected Officials focus on Water **QUANTITY**
- Increasingly – “everyone” is becoming more concerned about:
 - Erosion in general (both removal and deposition)
 - Creek channel incisions
 - Stream Health
 - The relationship between water quantity and water quality

Engineers have been Designing Ponds for a Long Time

- Traditionally - for water **Quantity** issues – but more so lately to address water **Quality** Issues
- Design Criteria (Quantity) evolve over time – APWA Section 5600 is about to change – *AGAIN* which will result in at least the third set of guidelines in the last 15 years.

The Leavenworth Experience

- The City has either constructed or required to be constructed detention ponds of various types and sizes over the years.
- It is fair to say that we – without too many regulations relied heavily upon the skills of the firms designing the ponds.

2/19/2019

9

What – Us Worry?

Listen to the Environment!

- We had calls that there was never any water in the basins.
- We had calls that even with large new upstream basins – there continued to be bank erosion damaging landscaping and infrastructure.
- Bank erosion has contributed to several critical infrastructure failures.

What the heck is going on here!?

2/19/2019

10

Inquiring Minds Wanted to Know! 2010 and 2012 were “Watershed” Years!

We had installed two rain gauges in 2010 and installed two more in 2012

Davis VantagePro 2 (about \$600)



2/19/2019

11

And - Depth Measurement Tools!

We also found “Autonomous Data Loggers” in 2012. They can live on the bottom of a pond or stream for months and record data – bought four of them (now seven)

Autonomous self-contained data loggers by Keller (about \$400).



2/19/2019

12

Fat, Dumb and Happy 2012 and 2013

We were really smart and learned a lot!

- Our first comparison of rainfall with detention basin performance verification revealed that in most cases – there was little or no performance.
- Learned that the streams in Leavenworth are “twitchy” – very sensitive (actually - *spectacularly sensitive*) to rainfall.
- Began to realize that managing a storm drainage system was going to take a LOT of work

2/19/2019 13

2013 EPA Visit, and 2014 KDHE MS4 Permits

- EPA “reminded” us that we were required to monitor the effectiveness of BMP’s required as part of projects.
- KDHE required water quality sampling at least four times per year

These two events essentially forced the City to get into monitoring on a serious basis

2/19/2019 14

Data - What We Do Now

So - From a Standing Start in 2010 and under very vague regulatory guidance since – we have evolved into the following into 2019:

- Rain Gauges - 4
- Stream Depth Monitors - 2
- Detention Basin/Stream Monitors – 3 to 5
- Sampling Program min. 4X/year (typically 6X)
(Initial indications are that sampling not required in next Permit!)
- Extended Informal Data Sharing Network
Leavenworth, Lansing, Basehor, Leavenworth County, misc. on-line users

2/19/2019 15

Things I can talk About - BUT –

Let’s talk about the one in RED today!

- Regulations, regulators, reality and more
- Data Collection methods, practices and pitfalls
- Figuring out what the sampling data means
- Evaluating Detention Basins and Ponds**
- Considering Water Quantity and Water Quality as the same problem rather than different ones
- What to do/not-do when the EPA comes to town.

2/19/2019 16

Profound Engineering Principles

Water **Quality** and Water **Quantity** measurements rely on basically the same Data.

“Unless you know your costs – you know NOTHING. You learn your costs by MEASURING THINGS”

(with some liberties) Ed Aulerich, Professor of Forest Engineering, Oregon State University 1976

2/19/2019

17

Monitoring Program delivers Immediate Results!

These devices have proven themselves many times over by “proving” to others that:

- *there actually **is** water in the basins when it rains!*
- *Rainfall was not “at least six inches” – but was more like three inches city-wide*
- *“It rained all night” is more like it was raining when you went to bed and stopped an hour later*

2/19/2019

18

We make Data Easily Available to the Public!

- Davis WeatherLink 2.0 is a fairly robust site readily available to the public - on-line and mobile app.
- Sign-up with one or more on-line sites to post/host your weather data.
 - Citizens Weather Observer Program (CWOP)
 - Weather Underground
- Make rain/wind summaries for PIO to post on social media sites

2/19/2019

19

Some Thoughts on Data

- You can never have too much data – but can come close with these devices!
- Select an interval that works for you
 - Weather Data – 15 minutes (Testing a 5 min interval)
 - Depth Data – 5 Minutes
- Expect a learning curve with the software for both the device and the spreadsheet as these are HUGE tables.
- The World is full of Data/Weather Junkies, find them for help.
- You too can become a weather junkie pretty quickly.

2/19/2019

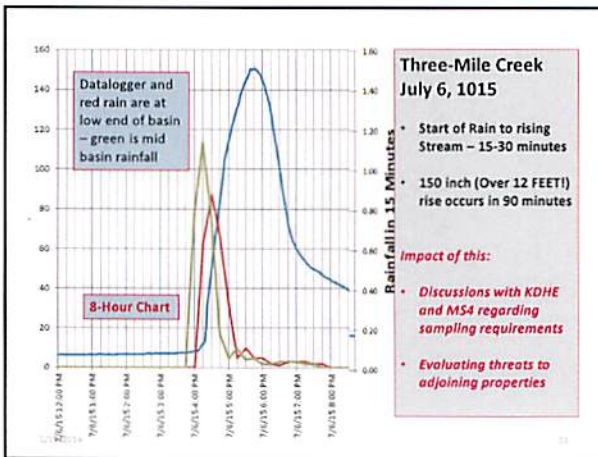
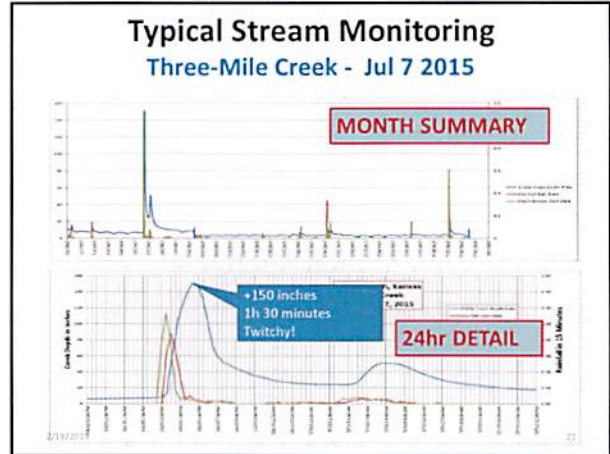
20

Useful Information? We think so!

How we use it:

- **Stream Flow Monitoring**
- **Detention Basin Monitoring and evaluation**
- **Local Rainfall Data**
 - For integrating into other monitoring
 - Design Considerations
- **Influence Local Regulations**

2/19/2019 23



Detention Basins

How to have fun and influence others with secret inside knowledge of what the ponds, basins, and similar are ACTUALLY doing!

2/19/2019 24

Eagles Pond a *BIG* project!

- Built by City in 2013 using CIP Funds
- An effort to reduce neighborhood Street Flooding and Sewer Back-ups
- Decades old problem
- A review of design documents from early 1960's showed it was built to standards with 5-year conveyances and lots of swales
- We would do it differently today!

2/19/2019

25

Eagles Detention Basin

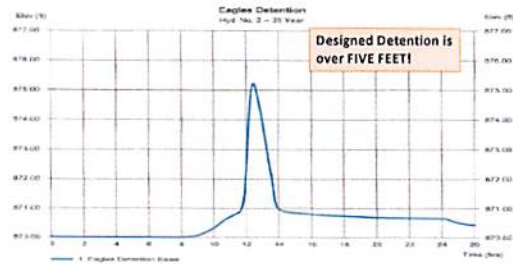


- City Owned
- Built in 2013
- 79,000sf surface
- 9' Deep
- 25-year overtop to street



2/19/2019

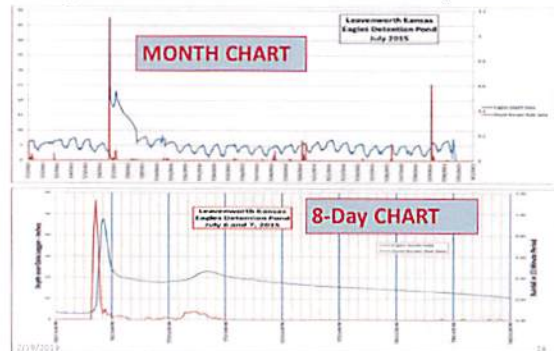
Eagles – 25 Year Detention 2013 Design Problem Solved? *Maybe!*



2/19/2019

27

Eagles Detention Basin – July 2015

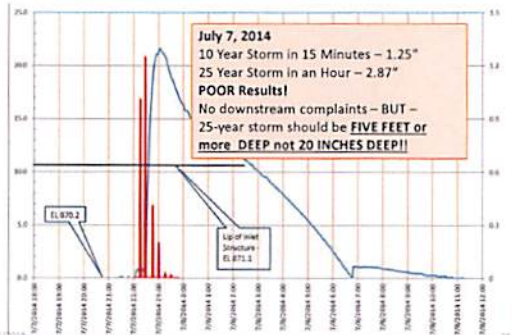


2/19/2019

28

Eagles – Actual 25 Year Detention in 2014

MAYBE NOT!!



Modifying the Basin

This was a city project – so we have a lot of opportunity to make changes

I shared this information with the design engineer as we acquired it. He was interested – that helps!

Working with the engineer – we figured that the underdrains and related systems we had installed to have the bottom of the basin near dry (key to upstream neighborhood support) were way too effective, draining out the inflow quite efficiently! (Worth contemplating how much water can enter a 4" opening!) So we made a few changes:

Modifying the Basin

This was a city project – so we have a lot of opportunity to make changes

First - We capped all of the drains except one and monitored a while. That helped, but was not enough.

Second – We reduced the one remaining opening from 4" to 1.5". That made a big difference.

Result – Basin now responds more as we "expect" it should.

Next – we may incrementally close the side entrances to the outlet structure.

BETTER RESULTS!

Eagles Detention Basin – 1 Year Storm

June 2015 – One Year Storm

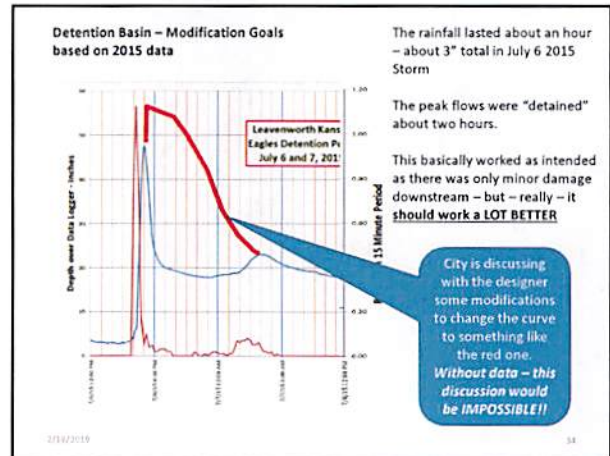
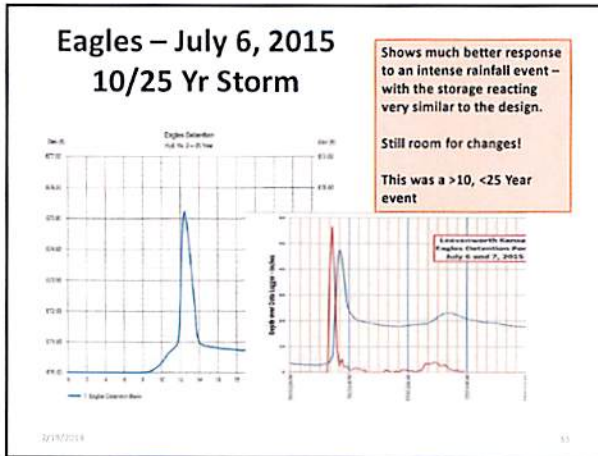
- After modifications we saw **better response** to actual rainfall



On July 6th 2015 the water was about a foot over the top of the inlet structure shown at left in a 10/25 year storm

Still 2 feet from overtopping the berm!

Still work to be done!



Eagles – Results (continued)

Cooperation is a very important tool!

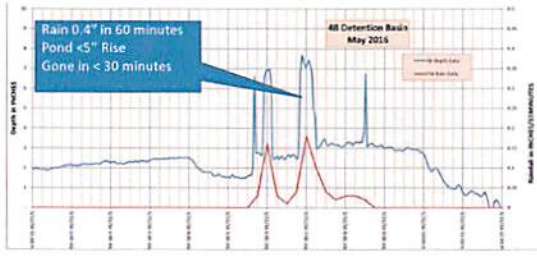
We were able to work with this designer on subsequent projects, and they were designed to be easily modified or adjusted.

- Need for adjustments was focused on underdrain systems.
- Next project will be able to easily modify opening sizes

2/19/2019 55



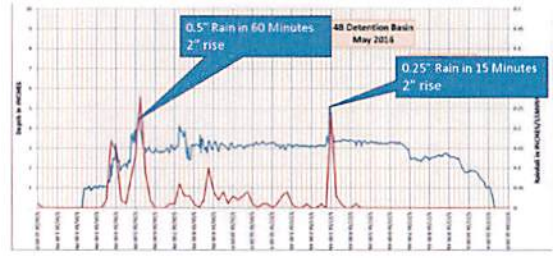
3B Detention Basin, 11 May 2016
 Built 2005, 13,000sf Surface, 32.5' deep



2/19/2019

17

3B Detention Basin, 27 May 2016
 Built 2005, 13,000sf Surface, 3.5' deep



2/19/2019

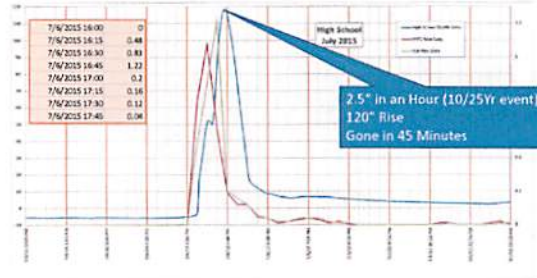
18

Leavenworth High School - 2011
 13,000sf Surface, 13' Deep



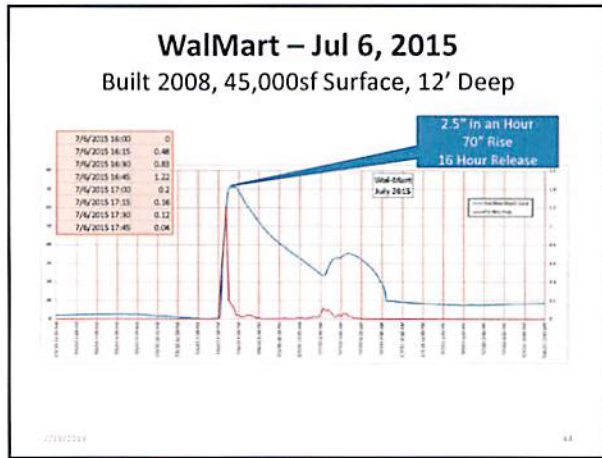
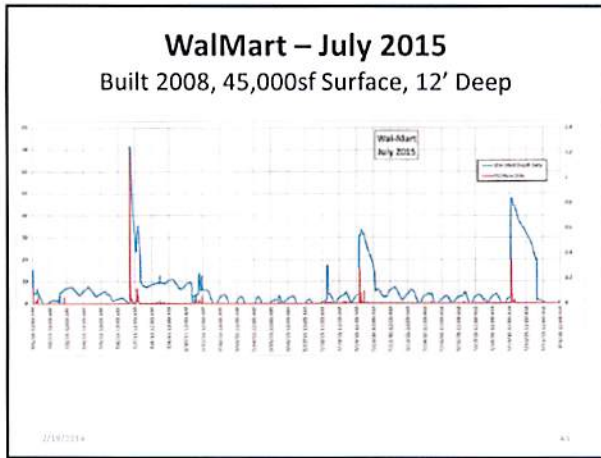
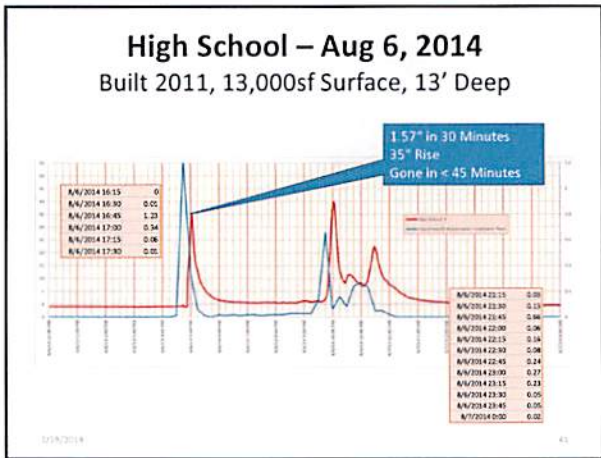
2/19/2019

Leavenworth High School – Jul 6, 2015
 Built 2011, 13,000sf Surface, 13' Deep



2/19/2019

40

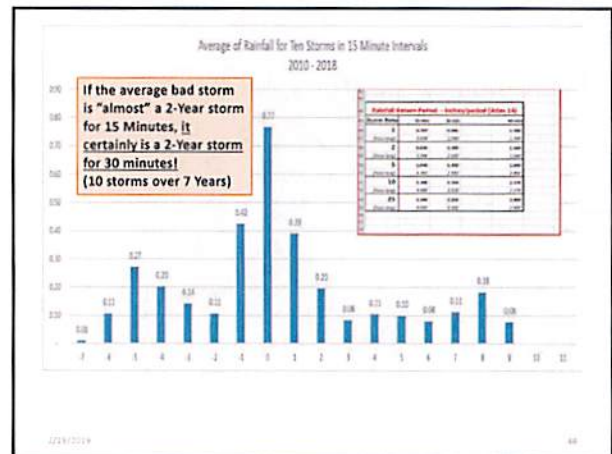
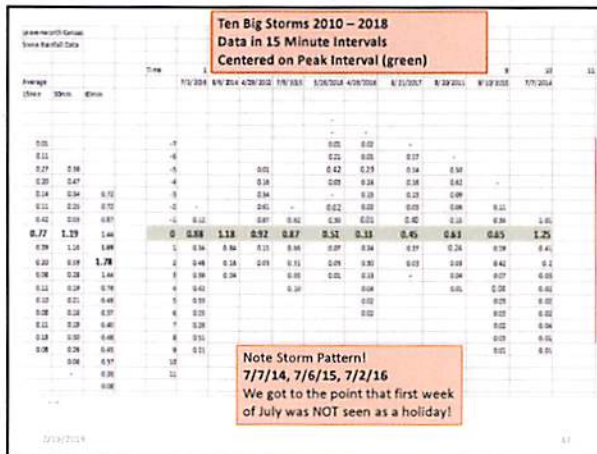


Results

- Pond performance is not necessarily as expected or as designed, even if it “works”
- Pond performance can be modified
- Ponds can be designed to meet complex expectations

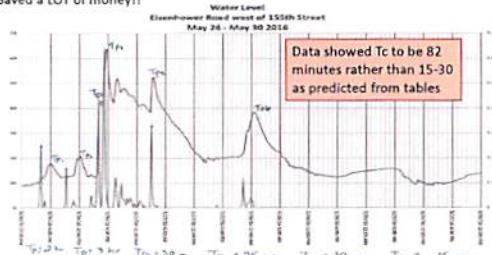
Let’s talk Rainfall

You really cannot evaluate or design ponds, basins or streams without studying rainfall. Intensity and timing are the critical elements of rainfall. Much design work is focused on short interval events – up to 15 and 30 minutes time of concentration – real world data is not necessarily as expected from tables
 Actual “Time of Concentration” can be determined with basic measurements



Real Data to the Rescue

We placed a data logger at a box culvert replacement, got lucky with a few big rains – and here is the Engineers work sheet on Tc. Eventually settled on Tc=82 minutes and HY8 Model which matched existing conditions very well. Saved a LOT of money!!



More Design Stories

- We liked what we were doing and planned ahead for 2017 and 2018 projects with good results.
- City has shared this data with designers of existing ponds and asked “Is it performing as expected”. In most cases there is no response at all. In others – they are very interested.

Things You Can Do

- This type of information gathered over time can lead to creation of stream specific tools such as stage/discharge graphs, hydrographs and other useful things to manage runoff for both quantity and quality. There is a wide variation between the calculated volume from stage/discharge graphs and observed conditions
- A smart person can use this information to verify model inputs/outputs with real world data (we are NOT doing this – but will gladly share)

New Initiatives in Leavenworth

- **Written Expectations** – Describe what we are trying to accomplish.
- **Prove Functionality** - We are considering adding a measurement component to permits on large basins.
- **Flexibility** – considering requiring multi-stage outlet structures WITH ability for some adjustments on larger (possibly all) ponds

New Initiatives +

- **Stage v. Discharge and Design Storm for Basins** - We are debating on requiring use of the July 6, 2015 storm (or some/all of the “big ones”) as part of the design discussion.
 - Requiring engineers to show how the basin would perform using that rainfall data.
 - We like it because 7/6/15 was a (nearly) 25-year storm, has real rainfall data and now has an institutional memory as well (motivated staff)

2/19/2019

33

“Pond”erments for Us as Engineers

Big Issue – **put some thought into designs!**

Owners and their representatives (and designers too) need to become familiar with the larger issues of stream health including patterns of erosion, degradation and water quality

Projects built solving one problem can likely be modified to solve several problems at minimal added cost.

2/19/2019

34

“Pond”erments for Us as Engineers

It appears that what has been designed in the past probably met specs (or lack thereof) and meets the definition of success mentioned earlier –

“nobody called or got wet”

We can do better!

2/19/2019

35

“Pond”erments for Us as Engineers

My Thoughts

- Retention and Detention facilities are often over-designed for their intended purpose, providing poor solutions to real problems.
- Efforts to keep the ponds “dry” may adversely impact the time of detention by underestimating efficiency of underground drains.
- “Facilities” (ponds) should be required to be evaluated over time as to meeting design criteria AND expectations.
- A Fertile Field exists for agencies and engineers seeking to improve existing facilities to meet today's (better understood) needs and modern regulations.

2/19/2019

36

So - Does it Perform as Designed?

- These things “work”, but often perform poorly/inefficiently - I believe we have shown that an interested staff with an interested engineer can:
 - Monitor performance with low cost instrumentation.
 - make modest modifications to existing structures to achieve better performance.
 - Design better systems targeted toward problem solving rather than simply “following the book.”

2/19/2019

17

Unanswered Questions

- At what point does stringing out the release period of detained water (both high and low flows) for much longer times adversely impact stream health and water quality?
- Could the Eagles Pond have been designed with a laser-focus on solving the problem rather than building a big pond, thereby saving a ton of money?
- Who should be responsible for the costs of retrofitting ponds and structures to meet today's criteria – agencies or owners? And When to modify?
- Rainfall seems headed for longer periods and higher intensity storms – designers and agencies need to look ahead with real data.

2/19/2019

18

Questions?

Michael G. McDonald, PE
 City Hall
 100 N. 5th Street
 Leavenworth, KS 66048
mmcdonald@firstcity.org
 913-684-0375

2/19/2019

19

Links

- <https://www.weatherlink.com/> - weather stations all over everywhere and a decent mobile app
- <http://www.wxqa.com/> - Citizen Weather Observer Program
- <https://www.wunderground.com/> Weather Underground
- <https://www.davisinstruments.com/> - Weather Stations
- <https://www.kelleramerica.com/> - Keller Autonomous Data Logger
- <https://youtu.be/ykkAOJMVvk> - One of many EXCEL tip videos on YouTube related to working with really big spreadsheets
- If you want to be added to my periodic musings on this and other barely related subject material via a “*poor mans email blog*” – send me an email asking to be added.

2/19/2019

20

Appendix D

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report – Section E) (BMP Numbers 1 & 2)

BMP 1 – Public Education and Outreach & BMP 2 – Public Involvement and Participation

- Public Information
 - City Leaf Pick-Up Program
 - Leavenworth Times – Various Stormwater Articles
 - Newsletter Articles:
 - a. Summary Report with Photos
 - b. Three-Mile Creek Bank Stabilization
 - c. Citywide Spring Cleanup Date Set
 - d. Household Hazardous Waste
 - e. Leavenworth County Transfer Station Annual Cleanup
 - f. Annual Arbor Day Celebration
 - g. Leavenworth High School Science Class Students Visit WPC
 - h. Touch-a-Truck
 - i. Curbside Leaf Pickup
 - j. WPC Summary Report
 - k. Examples of Public Information
- 2018 Spring Cleanup Flyer and Documents
- City Commission Agenda
 - a. City Commission Policy Reports Related to Stormwater Fee
 - b. City Commission Policy Reports Related to Stormwater Management Program and Annual Report

From: Melissa Bower
Sent: Tuesday, January 16, 2018 10:02 AM
To: City Employees
Subject: THIS WEEK: Jan. 16



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- Trash is delayed one day throughout the week. Solid waste crews were out this morning collecting trash in -4 degree temperatures. We thank you for everything that you do!
- City staff treated and plowed all routes this weekend, beginning Saturday night, Sunday during the day, Sunday night and Monday. They began with emergency snow routes then moved to residential roads and downtown parking lots. According to our Snow Removal Policy, the City cannot guarantee that we'll plow to bare pavement. The solution we use for treating roads is a mix of calcium chloride and salt. When temperatures fall below 20 degrees Fahrenheit, it is too cold for the mixture to melt ice. All we can do is wait for temperatures to warm up.
- Before you drive on state highways, both the Kansas and Missouri Departments of Transportation have maps that share up-to-date information on road conditions. They are online here: Kansas <http://www.kandrive.org/kandrive> or Missouri <http://traveler.modot.org/map/>
- For the City Commission study session tonight, the Commissioners are scheduled to hear a review from the Leavenworth Main Street organization, a review of the City's leaf pick-up program and an update on the stormwater program. All meetings are open to the public. Agendas are posted online by the City Clerk's office every Friday afternoon. The Jan. 16 agenda is online here: http://www.lvks.org/egov/documents/1515780287_79487.pdf

Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

Opinion

LETTER: Stormwater tax coming

By Donna Gillett / Leavenworth

Posted Jan 18, 2018 at 9:19 AM

To the editor:

My apologies for my error in my Jan. 11 letter. It should have read "On a \$200,000 appraised (not assessed) value home ..."

In addition to those taxes listed for Leavenworth, there is a 5 percent fee paid by utility companies operating in the city. Then we pay the franchise fee on gas, electric and telephone bills. So if the electric bill was \$173, it would include \$8 for franchise and \$5 for sales tax. This does not include cell phone and internet taxes.

Remember that city voters approved a sales tax raise with no ending date, Ordinance No. 7933, effective July 1, 2014, as a general fund tax revenue source that is not allocated by percentage.

Soon we will have a substantial tax added to pay for needed stormwater drainage system repairs. City Manager Paul Kramer says that \$85 million will not totally pay for the repairs, but it's a start. He said, "Any city funds, outside of refuse and wastewater, could be used for those repairs. It's just a matter of what you would then need to cut."

Stormwater repairs absorb 15 percent of the city's part of the countywide sales tax, which also supports debt reduction, sidewalks and economic development.

The Leavenworth Times' initial report estimated that \$36 added to our property tax bill would pay for the work. But by Dec. 6, commissioners had discussed one fee for a single-family residential unit to range from \$75 to \$270 per year. Last week, Kramer said, "The former City Commission determined to include a stormwater fee on the property tax statement. However, the level has not been set at this time."

When asked about the years of neglect, Kramer said, "The city has not had a stormwater fee to this point. Therefore, there has not been adequate funding to properly maintain the system." He said the Eisenhower VA Medical Center and Fort Leavenworth being charged the fee has not been determined yet.

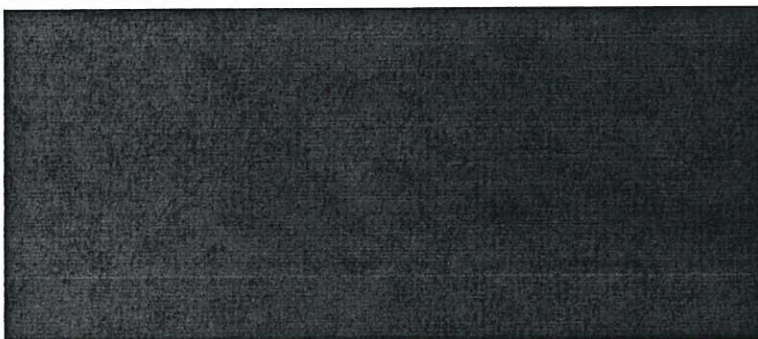
Thus far, we have covered the taxes and mill levies for the state, county and city of Leavenworth. Those three entities combined get 70.211 mills from our personal and property taxes. The single entity that receives the remaining 63.335 mills will start in the next letter.



SIGN UP FOR DAILY E-MAIL

Wake up to the day's top news, delivered to your inbox

MOST POPULAR STORIES



Matthew T. Mangino: Few prisoners benefit from compassionate release

```
[gh:style].embed-container { position: relative; padding-bottom: 56.25%; height: overflow: hidden; max-width: 100%; } .embed-container iframe,...
```

[Read More](#)

City advances charter ordinance for stormwater program

By John Richmeier / jrichmeier@leavenworthtimes.com

Posted Jan 24, 2018 at 9:04 AM

Leavenworth city commissioners have taken another step toward implementing a fee to pay for the maintenance of the city's stormwater system.

Leavenworth city commissioners have taken another step toward implementing a fee to pay for the maintenance of the city's stormwater system.

When they met Tuesday, commissioners had their first consideration of a charter ordinance that will exempt the city government from provisions of the Kansas Water Pollution Act and enable the city to establish a stormwater management program and stormwater utility fee.

Commissioners reached a consensus to advance the charter advance for a final vote during a Feb. 13 meeting.

For months, commissioners have been discussing plans to establish a fee to pay for maintenance of the stormwater system, which carries rainwater away from buildings and roads. The water is channeled into creeks and watershed areas.

City officials say they have identified about \$84 million in needed maintenance.

Commissioners plan to have the fee included on annual property tax statements.

While city staff members have presented fee proposals, commissioners have not yet set any rates.

"This charter ordinance does not set any rates," Assistant City Manager Taylour Tedder said.

If the charter ordinance is approved by commissioners next month, there will be a 60-day protest period, City Clerk Carla Williamson said.

Also Tuesday, commissioners approved the Leavenworth Police Department's purchase of a new truck and another piece of equipment.

The truck will be used for the Police Department's Special Weapons and Tactics Team. The truck is being purchased from LDV Custom Specialty Vehicles, Burlington, Wisconsin, for \$126,063.

The Police Department also is purchasing a laser scanner from Faro Technologies, Lake Mary, Florida, for \$44,548. The equipment will allow police officers to capture data about crime scenes and accident scenes using laser measurements, according to Police Chief Pat Kitchens.

Commissioners also approved a contract with TreanorHL, Topeka, for an amount not to exceed \$66,300. The company will perform design work for the remaining phase of a stone replacement project at the Riverfront Community Center.

Twitter: [@LVTNewsJohnR](https://twitter.com/LVTNewsJohnR)



SIGN UP FOR DAILY E-MAIL

Wake up to the day's top news, delivered to your inbox

MOST POPULAR STORIES

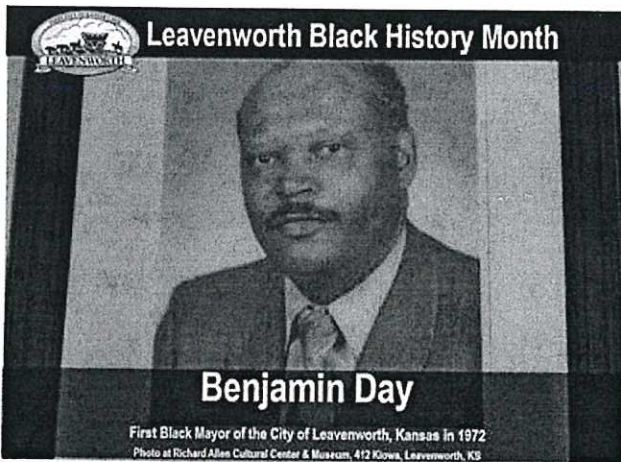


From: Melissa Bower
Sent: Monday, February 05, 2018 10:20 AM
To: City Employees
Subject: THIS WEEK: Feb. 5, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- **Contractors are scheduled to begin work on a City project this week to stabilize the banks near Three Mile Creek.** The intent of the plan is to repair soil erosion and re-open the walking trail to the public. Some of the parking stalls adjacent to Stove Factory Lofts will be closed during the construction.
- **Date and activities for the Leavenworth Citywide Spring Cleanup have been set.** We usually receive many requests from the public for information. The event takes place Saturday, April 7. Teams of volunteers will pick up trash in public areas of the City. The City will offer services regularly offered during our Free First Saturday such as bulk item drop off, metal drop off, recycling center hours and brush site hours. There will also be a disposal station for Household Hazardous Waste. Citizens Savings and Loan is sponsoring free paper shredding at their bank. Times and locations are on the City's website here: <http://www.lvks.org/topic/index.php?topicid=10&structureid=43>
- Black History Month is always special in Leavenworth. We have many accomplishments to celebrate. This note about our first black mayor Ben Day was posted on the City's social media sites, with a couple of community responses below.



Glynnis Day Thatch Yay!!! My Dad. I loved him more!! I am so honored to have this post. Thanks Cyndi Fry for tagging me. Ingrid Frey Laraine Geathers He left us a great legacy. I remember him not only as my Dad, but he was also my principal when I was in 2nd grade, and my Mayor when I was 10 years old. It was fun to get to go to the principals office to wait for Daddy to get off work. Also when he was the Mayor, I got to go to City and I just hung out there doing homework or probably talking too much to the ladies that worked in the office. 😊. What an honor to be his daughter. But guess what?? He was also my Pastor. He was Pastor of the Davis Temple Church in Excelsior Springs, MO. We would drive there to church every Sunday and Thursday. He was a loving Dad and he loved his family. Thanks City Of Leavenworth-Government for this recognition. Gone but never forgotten.

Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>


View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

Leavenworth, KS 66048

[Get Directions](#)

- Business Fax: (913) 680-2598
- Phone: (913) 680-2610

Related Topics

 [Department Home](#)

Topics

- [Grow Leavenworth County Development Corporation \(an E-Community\)](#)
- [Spring Clean-up 2018](#)
- [Application for Subdivision Development](#)
- [Sister City Program](#)

Divisions

- [Media Room](#)
- [Leavenworth CVB](#)

You are here: [Home](#) > [Departments](#) > [City Manager](#) > [Spring Clean-up 2018](#)

- [About This Topic](#)
- [Documents & Reports](#)
- [More Information](#)
- [News & Notices](#)

Spring Clean-up 2018

[Flyer for 2018](#)

[Volunteer form](#)

[Map of areas for the 2018 Spring Cleanup](#)

The Citywide Spring Clean-up is held each year in April. Volunteers pick up trash in various assigned areas of the City of Leavenworth, with the goal of cleaning the entire city in one day. The 2018 Spring Clean-up will take place Saturday, April 7, beginning with an 8:30 a.m. ceremony at Warren Middle School. We will have doughnuts, coffee and music.

What is available on Saturday, April 7?

- Recycling Center at Leavenworth and Haldeman streets will be open 8 a.m. to 4 p.m.
- [Household Hazardous Waste](#) may be dropped off behind the Service Center, off Pennsylvania Street and Lawrence Avenue, 8 a.m. to noon
- Large item drop off (furniture, metals, mattresses) off Pennsylvania and Lawrence Avenue, 8 a.m. to 4 p.m.
- [Brush Site, 1803 S. 2nd St., is open 8 a.m. to 3:50 p.m. for Leavenworth residents to drop off brush and other yard waste.](#)

Who participates:

Scout troops, church groups, service organizations, local businesses, schools, sports teams and sports booster clubs, campaigning legislators, nonprofit organizations, groups of Soldiers and Department of Defense civilians, families, or anyone else who would like to pick up trash. Volunteers receive a free T-shirt and one-day pass to Wollman Aquatic Center, 13th and Shawnee streets, in Leavenworth.

How to participate:

1. [Fill out a volunteer form for your group](#) by March 5
2. If you don't have a group, inquire at melissab@firstcity.org to find out if we can match you with another group
3. E-mail, fax, photograph or e-mail or bring form in person to:

Melissa Bower
913-680-2610
melissab@firstcity.org
100 N. 5th St., Leavenworth City Hall, Leavenworth, KS

4. Come to the Spring Clean-up kick-off 8:30 a.m. Saturday, April 7 at Warren Middle School, pick up your volunteer boxes that include T-shirts, trash bags, plastic gloves, a map and instructions for the clean-up. You're welcome to take doughnuts to team members!
5. Go to your site with your Spring-Clean-up volunteer team and pick up trash. When you're finished, find a street corner or other designated site and e-mail melissab@firstcity.org or call 913-702-2458 to let us know that your trash bags are ready to be picked up!

Re: 2018 Stormwater Improvement Project
3-Mile Creek Bank Stabilization Project
Leavenworth, Kansas

SUMMARY

The above was a bank stabilization project near the outflow into the Missouri River that resulted from the existing north bank sliding down to the creek. A study was completed to determine a plan of action. A design was created and the project was put out for bid.

The project included:

1. Clearing and grubbing of the existing north bank.
2. Remove the existing storm pipe that had collapsed and slid down the bank.
3. Installation of 24" Rip Rap creating a LPSTP.
4. Installation of 24" Rip Rap creating Grade Control in two locations.
5. Reconstruction of the entire north bank. Consisting of compacted stepped lifts supported with geogrid and erosion control blanket.
6. Installation of various plantings over the new stepped slope.
7. Erosion control blanket and seeding of the top of the slope.
8. Installation of an area inlet and pipe to catch and direct parking lot runoff.
9. Upon completion, the City crews continued to water the plantings to more quickly establish root growth resulting in better slope stabilization.

The project was satisfactorily completed which resulted in a well-stabilized north bank to better control the water flows of 3-Mile Creek.

3-Mile Creek Bank Stabilization, Leavenworth, Kansas (2018)



3-Mile Creek Bank Stabilization, Leavenworth, Kansas (2018)



Your News

READER PHOTOS

CONSTRUCTION



JIM BASKAS

Shown is the construction on 3 Mile Creek at the 2nd Street bridge in Leavenworth.

SCHOOL AWARDS



When can we eat the fish?

When can we eat the fish? That is the question posed by the fish-reliant populations around Lake Superior such as the Keeweenaw Bay Native American community and others. If you like to eat fish, and especially if your culture has developed around eating fish caught in the Great Lakes, then you have to be concerned about the environmental problems of pollution and how they affect the fish.

As reported in the 2018 Michigan Technological University magazine Research, "All of the Great Lakes are connected to each other and to the rest of the world. This is particularly true when it comes to atmosphere-surface exchangeable pollutants (ASEPs). In other words, where the air meets the water, there is an exchange of molecules and too many of these are pollutants that can do us great harm.

"ASEP molecules are invisible, tasteless world-hoppers that can travel great distances to eventually migrate to Lake Superior, where they move



Matt Nowak

TIMES COLUMNIST

mine tailings, that were dumped for more than 100 years into Lake Superior as part of the copper and iron mining process. The thought was that if we cleaned up the toxic waste dumps, we could clean up the water source for the people and for the wildlife.

Unfortunately, computer modeling shows that this effort alone will at best decrease mercury contamination in the Great Lakes by only 20 percent by 2050, which is not enough to safely consume fish at desired levels. So where are the mercury and other pollutants coming from?

At Michigan Tech, they are studying and trying to better understand tropospheric chemistry and composition. The bottom line on atmospheric sources of mercury is

emissions are controlled and apparently that is not happening in China. Even in the United States, EPA leaders have not enforced mercury emissions controls in at least 19 coal-fired power plants in the region that affects Chesapeake Bay.

I have never found anything good about consuming mercury and everything that I have read says that mercury consumption is bad for your brain and reduces your intelligence as measured by intelligence quotient tests.

The Native American people in the Great Lakes region have great concern for their culture as it would appear that it will be generations before local fish and wildlife will be safe to eat on a regular basis.

Occasionally eating smoked lake trout at a tourist stop, as I have done on several occasions, is not the same as eating trout, walleye and whitefish multiple times a week simply because it is both accessible and part of your natural food source.

If we want a clean at-

City plans to reopen Three-Mile Creek trail following bank stabilization



Contractors are working on a bank stabilization project at Three Mile Creek. This is to prevent soil erosion and to re-open the pedestrian bridge connecting the trail and Leavenworth Landing Park. Contractors will install rip-rap, fill in with soil and tuck point under the bridge. The project is being funded in part by Kansas Gas Service, a division of the company that owns the property where erosion had been occurring. The project is scheduled to be completed in the late spring/early summer.

Leavenworth city code defines grass height

The City of Leavenworth has, for many years, a code requiring property owners to keep grass cut to 12-inches in height. The code reads:

“Weeds and indigenous grasses on or about residential property which, because of its height, has a blighting influence on the neighborhood. Any such weeds and indigenous grasses shall be presumed to be blighting if they exceed 12 inches in height.”

Those who violate the code are subject to a letter from the City and fines. If the property is still not mowed, the City will send out mowing crews. Costs for City mowing residential properties are:

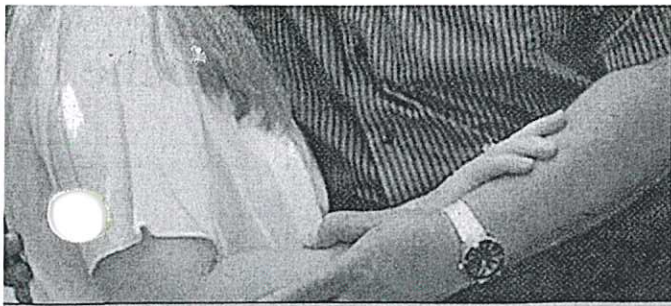
- (1) \$100 administrative assessment fee for the first mowing plus contractor expenses;
- (2) \$250 administrative assessment fee for the second mowing plus contractor; expenses
- (3) \$500 administrative assessment fee for the third mowing plus contractor expenses;
- (4) Any additional mowing after the third violation will be assessed a \$500 administrative assessment fee plus contractor expenses.



The Public Works Department is working on repaving city-owned downtown parking lots as part of goals set forth by the City Commission. The plan is to re-do one parking lot each year.

In 2017, the City replaced curbs, sidewalks, gutters and storm drainage on a lot at Third and Cherokee streets, across from Pullman Restaurant. Contractors will finish repaving the lot in 2018. New trees are also being planted.

In 2018, the City plans to redo the lot pictured above at Sixth and Cherokee streets, across from Ten Penny Restaurant. The work will include new sidewalks, resurfacing, new storm drainage and new entrances and new curbing.



Local couples share their views on true love

**"If you live to be a hundred, I want to live
be a hundred minus one day so I never have
to live without you."**

— A. A. Milne

Jim Murry is the administrative officer at the Dwight D. Eisenhower VA Medical Center and his wife Jean is an RN Care Manager and she works in the Women's Health Center at the VA.

**Don, after 10 years together, what is the secret of
being as devoted and happy as the day you met?**

The secret is to not stay as devoted and happy as the day you met. The real secret is to gradually grow increasingly devoted and happier as we share our lives together.

**"I saw that you were perfect and so I loved
you. Then I saw that you were not perfect and
I loved you even more."**

— Angelita Lim

Don and Sherry Brown own Kansas Country Store and several rental properties as well as two other commercial buildings. Sherry also manages her parents' rental properties, while Don raises beef cattle and Paint Horses. He is also on the Board of LAWS (Leavenworth Animal Welfare Society).

**Sherry: After 20 years together, what is the secret of
staying as devoted and happy as the day you met?**

You might say we are both a bit unconventional. Everyone is made differently and we have never tried to change one another.

LOVE, A6

By RIMSIE MCCONIGA

See LOVE, A5

Intermediate school to open August

By JOHN RICHMEIER
@leavenworthtimes.com

Lansing Intermediate school will open at the start of the next year.

It was the decision of the Lansing Board of Education. In recent months, members have decided on opening an intermediate school in a building that is currently served as a school.

When they met Monday, board members voted unanimously to move forward with opening the building in time for when the 2018-2019 school year begins in August.

The intermediate school will open in the former middle school building located at 509 Ida St. Classes for grades four and five will be moved from the nearby building.

See INTERMEDIATE, A6

LEAVENWORTH CITY COMMISSION

Stormwater management program ordinance tabled

By JOHN RICHMEIER
richmeier@leavenworthtimes.com

When they met Tuesday, the Leavenworth City Commission tabled a proposed charter ordinance for creating a stormwater management program. But commissioners plan to revisit the ordinance again Feb. 27.

Commissioners have been discussing the possible implementation of a fee to pay for maintenance of the city's stormwater system, which carries rainwater away from buildings and roads. The water is channeled into creeks and watershed areas.

City officials say they have identified about \$84 million in needed maintenance. Commissioners plan to have the fee included on annual property tax statements.

Commissioners have not yet set the rates for the fee, but they have been presented options for charging between

\$75 and \$270 per year for single family residences.

The ordinance that was tabled Tuesday would exempt the city government from provisions of the Kansas Water Pollution Act and enable the city to establish a stormwater management program and stormwater utility fee. But the ordinance would not set the rates for the fee. Those would be approved later.

See STORMWATER, A3

2-14-18

promised to move the train by Saturday.

Gonyo says he wants to move the train "as much as anyone."

Wisconsin GOP Senate candidate's parents donate to his rival

The parents of Republican U.S. Senate candidate Kevin Nicholson have donated the maximum amount to the campaign of their son's Democratic rival, Sen. Tammy Baldwin.

Nicholson is in a primary battle against Republican state Sen. Leah Vukmir, with the winner advancing to take on Baldwin in the fall.

Federal records show that Nicholson's parents, Michael and Donna Nicholson, both gave \$2,700 in December to Baldwin. Nicholson is a former Democrat, but his parents have a long history of donating to Democratic candidates. CNN first reported the donations to Baldwin.

Nicholson says in a statement that "My parents have a different worldview than I do, and it is not surprising that they would support a candidate like Tammy Baldwin who shares their perspective."

Nicholson says he is a conservative choice "not because I was born one."

By the Associated Press

Police in New Hampshire say when they went to an apartment to arrest a man on a drug charge, his mother told them he was fatally shot inside and then led them on a two-state chase.

A body hasn't been

found.

WMUR-TV reports 54-year-old Carmelita Vergez pleaded not guilty Thursday to several misdemeanor counts.

Police in Nashua say Vergez told them Wednesday about her son's death, but drove off as they attempted to learn

more.

They said Vergez led them into Tyngsborough, Massachusetts, where she caused a minor collision before driving back to Nashua, about 20 miles.

Police arrested her after her van struck another vehicle and she ran off.

STORMWATER

Continued from A1

Commissioners had what is referred to as first consideration of the ordinance last month. At that time, commissioners reached a consensus to advance the ordinance.

The ordinance was placed on the agenda for Tuesday's meeting for a final vote.

After Tuesday's meeting, City Manager Paul Kramer said the ordinance was tabled because of a transition in the city attorney position.

Tom Dawson is stepping down from his duties as the Leavenworth city attorney. Tuesday marked the last time he attended a City Commission meeting as the city attorney.

For now, the city will be relying on the services of an interim city attorney. And Kramer said the person taking over the city attorney duties will be involved with the ordinance.

In other business

The Leavenworth City Commission:

- Approved a contract with Hamm Landfill, Lawrence, for landfill services for the disposal of sludge from the city's wastewater treatment plant for 2018 for an amount not to exceed \$102,900.

- Approved an agreement with BG Consultants, Lawrence, for design engineering services for sidewalk projects for an amount not to exceed \$49,602.

- Approved a three-year contract with Superior Lawn Care & Snow Removal, Leavenworth, for mowing grass at various city-owned properties at a cost of \$44,128 per year.

- Granted a 90-day extension for a house at 1921 Fifth Ave. that has been placed on a demolition list. The extension gives the property owner more time to make repairs in order to keep the home from being demolished.

- Took no action regarding the purchase of a sport utility vehicle for the Code Enforcement Division. City Manager Paul Kramer said he can authorize a purchase of up to \$25,000 without City Commission approval. But \$28,000 had been budgeted for the SUV purchase.

However, bids for the vehicles came in for less than \$25,000 and action from the commission was not required.

The lowest bid of \$23,437 was submitted by Ed Bozarth Chevrolet, Topeka, for a 2018 Chevrolet Equinox.

- Listened to comments from Mike Jordan, who expressed concern because he believes there is a lack of programs for "at risk youth" in the community.

Mayor Mark Preisinger questioned Jordan about a comment he reportedly posted on the internet regarding corruption in Leavenworth including the City Commission. Preisinger said these are serious allegations and suggested Jordan could contact law enforcement agencies.

The mayor asked the city manager to provide an update to the commission about what programs are available for at risk youth.

ACROSS

- 1 Aquarium scavenger
- 6 Number needed
- 12 Half-shell item
- 14 Suave
- 15 Mind
- 16 Chair's concern
- 17 Drain cleaner
- 18 Shinto or Zen (abbr.)
- 19 Customary manner
- 21 Trim back
- 23 Suffix for hero
- 26 Home page addr.
- 27 Cousins of "um"
- 28 English racetrack
- 30 Marvy
- 31 --wester
- 32 Glide smoothly
- 33 Unseals
- 35 Hose ruiner
- 37 Geol. formation
- 38 More certain
- 39 "Nova" network

40 Green-

- house purchase
- 41 "Harper Valley --"
- 42 So far -- know
- 43 Family nickname
- 44 Plow into
- 46 R-V connector
- 48 Golfer -- Ochoa
- 51 Raises
- 55 Poltergeists
- 56 More glum
- 57 Hams it up
- 58 Linguine topper

DOWN

- 1 Wall
- 2 Bill --, the Science Guy
- 3 Embers, finally
- 4 Pisa locale
- 5 Impose taxes
- 6 Motor oil amount
- 7 Encourage
- 8 Giant stele
- 9 Sprinted
- 10 And, in Berlin

Answer to Previous Puzzle

I	O	N	T	S	K	S	U	S	D	A
V	I	A	U	T	A	H	N	E	A	L
A	L	I	N	O	N	E	H	A	Y	S
N	E	V	A	D	A	A	P	I	N	
R	E	A	R	A	P	I	P	T		
	R	A	B	B	I	T	E	E	R	
B	O	L	O	E	O	N	A	N	N	A
E	T	O	N	E	S	C	I	N	D	Y
G	I	G	U	N	C	A	P	S		
S	C	A	R	A	P	E	U	L	N	A
	A	P	E	X	T	R	E	A	D	S
D	E	B	S	E	R	A	S	P	E	A
O	P	I	E	N	O	M	E	E	L	L
S	A	N	S	A	C	E	S	S	E	E

- 11 Drop -- line
- 42 Stockpile
- 43 Napped leather
- 45 Wager
- 47 Snare
- 48 Size above med.
- 49 Physicist Georg --
- 50 Marsupial, for short
- 52 DJ's supply
- 53 New Year in Hanoi
- 54 B'way sign of yore

1	2	3	4	5		6	7	8	9	10	11	
12					13		14					
15							16					
			17				18					
	19	20			21	22		23	24	25		
26				27				28			29	
30				31				32				
33			34			35	36			37		
38						39				40		
	41				42				43			
			44	45			46	47				
48	49	50					51			52	53	54
55							56					
57								58				

Commission approves stormwater ordinance

By John Richmeier / jrichmeier@leavenworthtimes.com

Posted Feb 28, 2018 at 8:16 AM

The Leavenworth City Commission has taken another step toward establishing a fee to pay for maintenance of the city's stormwater system.

The Leavenworth City Commission has taken another step toward establishing a fee to pay for maintenance of the city's stormwater system.

Commissioners voted unanimously Tuesday to approve a charter ordinance exempting the city from provisions of the Kansas Water Pollution Act. The ordinance allows the city to create a stormwater management program and stormwater utility fee.

Also Tuesday, commissioners voted to approve one appointment to the Leavenworth County Port Authority Board of Directors. But another vacancy on the Port Authority board is being left unfilled for now.

Commissioners also were briefed about recommendations resulting from a transportation study of the county.

For months, commissioners have been discussing the implementation of a fee to pay for maintenance of the city's stormwater system, which carries rainwater away from buildings and roads. The water is channeled into creeks and watershed areas.

Commissioners have not yet settled on rates for the fee, but they have been presented options for charging between \$75 and \$270 per year for single family residences.

"This does not set the fee," City Manager Paul Kramer said of the charter ordinance that was approved Tuesday.

Commissioners had what is referred to as first consideration of the ordinance last month. Commissioners had no comment about the ordinance before taking the vote Tuesday.

The charter ordinance will be published in the newspaper once a week for two weeks. It will go into effect 61 days after the final publication unless there is a valid petition calling for a referendum on the issue.

During Tuesday's meeting, commissioners considered nominations from the Leavenworth County Commission to fill two vacancies on the Port Authority board.

Under an agreement that established the Port Authority in 1969, members of the Board of Directors are approved by the County Commission and City Commission.

County commissioners voted Feb. 6 to nominate Bob Patzwald and Vernon Fields to the Port Authority board.

When taking up the nominations Tuesday, Mayor Mark Preisinger said he wanted to review them individually. He started with Patzwald's nomination.

Patzwald, a retired deputy public works director for the city of Leavenworth, previously served on the Port Authority Board but his term recently expired.

"I think all of us know him," Preisinger said.

Commissioners voted unanimously to appoint Patzwald to a term that will expire at the beginning of 2022.

Preisinger said he has met Fields. The mayor called the nominee an upstanding gentleman.

But Preisinger suggested that commissioners interview Fields before moving forward with the nomination.

Preisinger noted that Fields currently serves on the Basehor City Council. The mayor said this could lead to possible conflicts of interest.

Preisinger also noted that Fields is a candidate for Congress.

The mayor said he would like to invite Fields to meet with the City Commission so commissioners can get to know him a little bit.

Several other commissioners agreed with Preisinger's proposal, and the City Commission took no action on Fields' nomination during Tuesday's meeting.

Kramer said he will reach out to Fields to arrange a meeting with the commission.

Representatives of the Mid-America Regional Council and the Kansas City Area Transportation Authority provided a presentation about a Leavenworth County transportation study. A representative of the Kansas Department of Transportation also was on hand for Tuesday's presentation.

Shawn Strate, planning manager for KCATA, said two public transportation alternatives, or plan recommendations, resulted from the study. One is an on-demand transportation service for the city of Leavenworth in which residents book rides a day in advance.

"We see this as a great first step," he said.

The other alternative, or recommendation, would be establishing a fixed transit route from Leavenworth to the Village West shopping area in Kansas City, Kansas. From this location, riders would be able to connect to bus routes that would take them to other areas of the Kansas City metropolitan area.

Strate provided cost estimates for these recommendations. The on-demand service in Leavenworth is estimated to cost \$400,000. The service providing connection to Kansas City, Kansas, could cost between \$225,000 and \$450,000.

He said there may be funding available through a state program.

"In any case, there needs to be some amount of local funding involved," he said.

Commissioner Larry Dedeker suggested focusing on transit service within Leavenworth before branching out with a route to Kansas City, Kansas.

Preisinger asked if the city can work toward applying for state funding for next year.

Kramer said there needs to be collaboration between the city and county governments. He said the transportation study was a countywide study.

"It's still a county service that is starting off in the city of Leavenworth," he said.

He said a logical first step would be in the city of Leavenworth, but this would be the first spoke in a countywide system.

Dedeker suggested the city of Lansing also could be included in the initial service.

Preisinger suggested that the recommendations of the study be presented to the County Commission.

Twitter: _____



SIGN UP FOR DAILY E-MAIL

Wake up to the day's top news, delivered to your inbox

LEAVENWORTH CITY COMMISSION

Stormwater fee discussed by commissioners

By JOHN RICHMEIER
jrichmeier@leavenworthtimes.com

Leavenworth city commissioners have not yet settled on a dollar amount for a stormwater maintenance fee. But during a meeting, commissioners discussed options that would charge annual fees ranging from \$72 to \$96 per year for single family residences.

For months, commissioners have been discussing the implementation of a fee to pay for maintenance of the city's stormwater system,

which carries rainwater away from buildings and roads. The water is channeled into creeks and watershed areas.

City officials say they have identified more than \$83 million in needed maintenance to the stormwater system.

In February commissioners approved a charter ordinance to exempt the city from portions of the Kansas Water Pollution Act. The ordinance will allow the city to create a stormwater management program and stormwater utility fee.

City Manager Paul

Other business

In other business

The Leavenworth City Commission:

■ Reviewed photographs of 16 structures that will be considered for demolition as dangerous structures.

City Planner Julie Hurley said commissioners will be asked in May to vote on a resolution to set a public hearing to discuss the structures. The hearing likely will take place in June.

■ Reviewed designs for a proposed sign at a new business and technology park that is being developed for the city at 14th Street and Eisenhower Road.

Mayor Mark Preisinger asked Mike Reilly with the development firm JMK Partners to return to the commission with two proposals based on the recommendations of commissioners.

■ Discussed an invitation by the Leavenworth County Commission to have a joint meeting.

Preisinger asked City Manager Paul Kramer to suggest an upcoming study session of the City Commission as a possible date for the joint meeting.

Kramer said he will reach out to County Administrator Mark Loughry.

Kramer said Tuesday that the protest period for this ordinance will

expire next month.

He said the commission will next need to

See STORMWATER, .

LEAVENWORTH COUNTY COMMISSION

Chairman criticizes judge in lawsuit

By JOHN RICHMEIER
jrichmeier@leavenworthtimes.com

Complaining about the length of an ongoing lawsuit, the chairman of the Leavenworth County Commission said Tuesday that the judge in the case needs to get off his "dead tush."

Chairman Louis Klemp also said he will refuse to participate in a deposition in the case even if he has to go to jail.

"I don't have any problems going to jail," he said.

At issue is a lawsuit that was filed last year on behalf of the Leavenworth County Commission to challenge the contracts of four employees.

The petition for the

declaratory judgment named Human Resources Director Tamara Copeland, County Counselor Mollie Hill, Deputy County Counselor Andrea Hughes and Road and Bridge Superintendent Vincent Grier as defendants in the case.

Grier has since been dismissed from the lawsuit.

Copeland, Hill and Hughes, who have filed counterclaims in the case, were terminated by the County Commission several months after the lawsuit was filed. Hill has since been hired to work for the Leavenworth County Sheriff's Office.

The contracts of Copeland, Hill and Hughes were approved by the County Commission

in 2016.

Copeland was given a five-year contract. The other contracts were approved for three years.

The contracts called for the employees to continue to be paid their salaries for the remainder of their contract periods after being terminated.

But after Copeland, Hill and Hughes were terminated in October, the County Commission stopped paying the former employees.

The lawsuit was filed after the makeup of the County Commission changed in 2017 as Doug Smith replaced Dennis Bixby as the commissioner from the county's 3rd District.

See CHAIRMAN, A3

Deputy involved in traffic accident

Teen on bicycle injured

By JOHN RICHMEIER
jrichmeier@leavenworthtimes.com

A member of the Leavenworth County Sheriff's Office was involved in a traffic accident in which a teen on a bicycle was injured, the undersheriff confirmed.

The crash was reported at 2:17 p.m. Monday at Third and Shawnee streets in Leavenworth.

The accident was investigated by a trooper with the Kansas Turnpike Authority. A report about the crash was posted on a Kansas Highway Patrol website.

According to the report, a 15-year-old Leav-

enworth boy was riding a bicycle east on Shawnee Street. He allegedly failed to yield to the deputy who was driving north on Third Street.

The vehicle and bicycle collided in the intersection.

The boy was taken to Overland Park Regional Medical Center.

The report does not identify the officer by name.

Undersheriff Jim Sherley confirmed that a member of the Sheriff's Office was involved in the accident. The deputy has returned to duty.

Twitter: @LV1 NewsJohn.

BRIEFS

Shed a tear: Artist shutting down gigantic eye projection

An artist who projected an image of a gigantic eye gazing over Main Street in New Hampshire's capital city is shutting it down after two years.

Artist Tom Devaney created the projection of his right eye from his studio in Concord. A few other eyes made guest appearances. Devaney tells the Concord Monitor he's making space for new works.

The project caught the eye of passers-by and became quite the conversation piece. Devaney says it was born from 3D video mapping techniques he was working on. Video of the blue-green eye moving and blinking were projected onto a foam board structure.

Devaney says he could operate the eye remotely from home. He also had a camera in the studio to see who was looking at it. He's holding a Say Goodbye to the Concord Eye send-off Thursday.

Girls can apply to take New Hampshire

STORMWATER

Continued from A1

approve an ordinance that will outline the stormwater management program including the funding structure.

He said commissioners have settled on using a tiered system for the fee with commercial and industrial properties being charged more per year than single family residences. The fee will be collected through property tax billings.

Kramer said city staff started off by looking at a fee structure that would generate more than \$2 million per year and pay for repairs within a 40-year period. But he said the fee burden seemed awfully high, so officials looked at a fee structure that would generate \$1.28 million per year.

Under this less expensive option, single family residences each would be charged \$72 per year. Commercial and industrial properties would be charged a range of fees depending on the size of the properties. Fees for commercial properties would range from \$325 to \$6,250 per year. Fees for industrial properties would range from \$675 to \$6,250 per year.

Kramer said Commis-

sioner Larry Dedeker still has expressed concern that some of the fees for commercial and industrial properties are too high.

Dedeker was absent during Tuesday's meeting. Commissioner Nancy Bauder also was absent.

Mayor Mark Preisinger said he does not want to downplay any of the costs to businesses. But he said the fee program needs to happen.

"I think the entire city is going to have to stand up and pay for it," he said.

He said the program cannot be delayed any more.

"The problem is there," he said. "The problem has to be addressed."

For Tuesday's meeting, commissioners were presented several fee structure options that would generate between \$1.28 million and \$4.17 million per year.

The first three options would generate \$1.28 million, \$1.39 million or \$1.51 million per year. Commissioner Mike Griswold noted these first three options had the same fee structure for commercial and industrial businesses, but the fee for single family residences differed.

The options would charge \$72, \$84 or \$96

per year for single family residences.

Kramer suggested the additional money generated from the third option could be used to pay off bonds that could be issued for specific projects.

"It is something you could do," he said.

Former Commissioner Phil Urban attended Tuesday's meeting and addressed the current commissioners.

Urban suggested raising the city's mill levy for the purpose of generating money for the stormwater infrastructure instead of charging the fee.

The mill levy is used in determining property taxes.

Preisinger said many properties in the city would be exempt from a property tax increase. But the fee being considered by commissioners is not a tax.

"This is a fee, not a tax," he said. "Everybody will pay."

He said the fee will be charged to tax exempt entities.

"This is the method we're going to use," he said.

Urban also suggested implementing the fee in stages. He suggested commissioners could start with a smaller fee that would generate be-

tween \$700,000 and \$800,000 per year.

Preisinger said the city will need to generate between \$1.2 million and \$1.5 million per year just to take care of basic repairs.

Preisinger broke down the \$72, \$84 and \$96 annual fees for single family residences to the monthly cost of \$6, \$7 and \$8. He asked his fellow commissioners which one they preferred.

Mayor Pro-Tem Jermaine Wilson said he prefers the \$72 annual fee.

"I don't think I'm ready to decide tonight," Griswold said.

Kramer said commissioners did not have to pick the exact funding option Tuesday. He said city officials have enough information to begin work on the drafting of the next ordinance that will be required.

He said the new ordinance cannot be approved until May when the protest period expires for the earlier charter ordinance.

Deputy Public Works Director Mike Hooper said the commissioners will need to settle on a fee by mid July so the information can be provided to the county clerk. Otherwise, the implementation process will be delayed a year.

CHAIRMAN

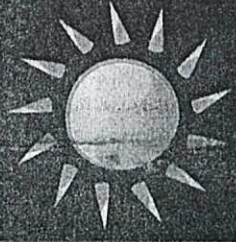
rule that the severance provisions of the contracts

Edward Bouker. Bouker is a senior judge

David Van Parys said that information should be

Benjamin Velayo is smiling because he said he is living alone again and that's the way he likes it.

LEAVENWORTH



SPONSORED BY
**HART'S PAINT
AND FLOORING**

High: 78 Low: 52
Sunny

**BULLETIN
BOARD**

Death reported

Authorities believe the death of a man who was struck by a train Thursday morning in Leavenworth was a suicide, a police

spokesman said. The incident was reported at 6:21 a.m. at Landing Park, Cherokee and Esplanade streets.

Wet weather limits parking during event

Due to wet weather Wednesday and predicted storms on Thursday, parking for Friday night's Lansing DAZE will be limited at Kenneth W. Bernard Community Park.

Attendees are urged to consider parking at Lansing High School, 1412 147th St., and use a free shuttle to get to the event. The shuttle bus will start running at 5:45 p.m. and run approximately every 30 minutes. The shuttle will run until approximately 11:30 p.m. Friday night. ADA parking will be available at Kenneth W. Bernard Community Park.

For more information, contact Public Information Officer Ken Miller at 012-727-5400.

county. Retro Bill also will appear at a classic car show and retro dance Saturday at Pleasant Ridge Middle School. The car show will begin at 4 p.m. The dance will begin at 6 p.m.

Meeting to provide information about stormwater fee

City staff members will be on hand to answer questions

By **JOHN RICHMEIER**

jrichmeier@leavenworthtimes.com

Officials with the city of Leavenworth will be on hand Tuesday to provide information and answer questions about proposed fees for stormwater maintenance.

The meeting will take place from 6 to 7 p.m. Tuesday at Leavenworth City Hall, 100 N. Fifth St.

City Manager Paul Kramer said handouts will be available that will

include the proposed fee structure. City staff members will be on hand to answer questions. Members of the City Commission also may be in attendance.

For months, commissioners have discussed the implementation of a fee to pay for maintenance of the city's stormwater system, which carries rainwater away from buildings and roads. The water is channeled into creeks

See **MEETING, A5**

Bond issue to be focus of meeting

Bond issue would pay for addition to Warren Middle School

By **JOHN RICHMEIER**

jrichmeier@leavenworthtimes.com

Officials with the Leavenworth school district will conduct public meetings next week concerning a proposed \$36.76 million bond issue.

Meetings are scheduled for 11:30 a.m. - 5 p.m. Monday at Earl M. Lawson Elementary School, 820 N. Fifth St., and 5:30 - 7 p.m. Tuesday at Richard Warren Middle School, 3501 New Lawrence Road.

If approved by voters, the bond issue

would close Lawson Elementary School as an elementary school, and the building would be converted into an early education center for all of the district's prekindergarten and kindergarten classes.

The bond issue also would pay for an addition to Warren Middle School, and all of the district's fifth-grade classes would be moved to that campus.

The bond issue also would pay for renova-

See **BOND, A1**

Volunteers participate in citywide

Sixty-five students signed up to participate

By **BETH KORNEGAY**

Special to the Times

In conjunction with Earth Day, Basehor Pride sponsored its annual citywide clean-up last weekend. Volunteers from Basehor-Linwood High School and Basehor-Linwood Middle School took to the streets, scouring them for litter and other discarded items.

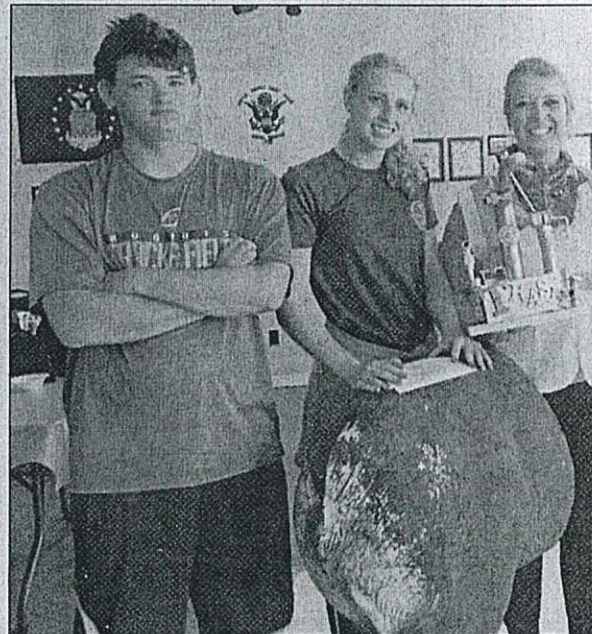
Sixty-five students

signed up for the community effort and were divided into teams, each led by an adult. Count-

See **VOLUNTEERS, A5**

BETH KORNEGAY

Aubry Walcott, Jenna Zydlo, Dumpster Diva team leader Elizabeth Novagradac, Dane Zydlo and Amy Eberth won the Trashiest Team trophy as part of Basehor Pride's Earth Day community clean-up.



An Expo for
Roomers and Seniors

Several works will be Miller Award. Winners will have the opportunity to take home an art store gift card and show their award-winning pieces in De Paul Library for the 2018-19 academic year.

Whitson, a 2015 USM graduate, works as a graphic designer in Lawrence and is a freelance graphic designer, web designer and photographer. For more on Whitson's work or to review her portfolio, visit leandrawhitson.com

Call 913-758-6184 for more information on the event.

LEAVENWORTH Local native honored for academics

Aimee Hanson, daughter of Anne Marie Hanson of Leavenworth, has been invited into the Theta of Minnesota Chapter of Phi Beta Kappa at College of Saint Benedict and Saint John's University. Hanson is a senior European studies major at CSB.

Hanson is one of 62 students from CSB and SJU to receive an invitation.

The students were inducted into the chapter during a ceremony April 25. A total of 50 seniors and 12 juniors were selected by faculty members at CSB and SJU who are members of Phi Beta Kappa, the nation's oldest academic honor

fires, playing trivia with his friends, family gatherings and taking trips.

In addition to his parents, he was preceded in death by his daughter, Sandra Hudson Prather; sisters, Aggie Scharer, Maureen Fox and Shelia Beaman, sister-in-law Mary Kay Hudson and son-in-law, Robert Simpson,

He is survived by his wife of 58 years, Sally Hudson of Andrews; daughters, Linda Simpson of Andrews and Julie Norcross and husband John of Robbinsville; son, Dan Hudson and wife Susan of Robbinsville; brothers, Ray Hudson of Colorado and Lowell Hudson of Alabama; brother-in-law, Gary Fox of Kansas; sister-in-laws, Sonya Moore and Priscilla Baker of Wyoming; grandchildren, Drew Norcross of Robbinsville, Chad Prather and wife Holly and Shay Simpson all of Andrews; great-grandchildren, Maleia and Kellan and several nieces and nephews.

A memorial service will be held at 10 a.m., Saturday, May 5, 2018 at the Holy Redeemer Catholic Church in Andrews. Father George Byers will officiate.

In lieu of flowers donations may be made to the Andrews Food Bank, P.O. Box 84 Andrews NC 28901.

Townson-Rose Funeral Home in charge of arrangements.

got cranky with his family.

Dick graduated from Leavenworth High School in 1962. He attended Kansas State University and graduated with bachelor's degrees and master's degrees in Anthropology and Linguistics. He also attended Washington University in St. Louis and completed everything except the dissertation before leaving school. Dick is also a veteran of the U.S. Army and served in Thailand during the Viet Nam years.

Dick held several different career positions through the years. He retired from Butler Community College in 2011 with the title of Professor, Computer Information Technology. Dick also had many hobbies, including Ham Radio, and always pursued them with enthusiasm, learning everything he could. Dick also enjoyed listening to music of all kinds, including The Rolling Stones, jazz, and classical music. His favorite composer of all was J. S. Bach.

Dick was preceded in death by his parents and leaves behind his wife, Peggy; son and daughter-in-law, Will and Amy Hageman and their two children, Annika and Daniel; stepson, Anthony McKelvy and daughter-in-law, Suzanne and their two children, Christina and Abby; sister and broth-

collected by the volunteers, who were then treated to a chili lunch at the Basehor VFW when they returned from their routes.

"Basehor is a beautiful community and why not take advantage of a beautiful spring day to clean it up and make it even more beautiful?" said Dustin Barker, Earth Day chairman for Basehor Pride. "It's also great to set a good example for the young people of Basehor to help with this project."

Second-year volunteer Jim Wilson believes volunteering for the clean-up is important because adults can lead by example. He was a team leader for some of the BLMS students who also took the

Volunteer Steve Scott, pastor of First Baptist Church of Basehor, had a community member give \$20 to his team as a way to thank them for their efforts. Scott thanked that resident and when the team was done cleaning up their route, they went to Casey's General Store to get a drink. Scott was planning to pay with the \$20 that was given to his team, but when he got to the register another resident in front of him had already paid for the drinks for the student volunteers.

"You wouldn't see that sort of thing happen in a larger part of Kansas City," he said.

After the trash pick-up concluded and the

interesting items included some undelivered mail, a speeding ticket, \$30 in cash, a mailbox, an iPod and a Social Security card which was turned into the Basehor Police Department.

The annual trash trophy was awarded to a team which found a 3D archery target in the shape of the back half of a deer.

The winning team was awarded a gift card in addition to the trophy for their extraordinary find.

Beth Kornegay is a freelance writer covering news and events in the city of Basehor. If you have a story idea, email her at gabi_kansas@yahoo.com

MEETING

Continued from A1

and watershed areas.

City officials say they have identified more than \$83 million in needed maintenance to the stormwater system.

During an April 17 meeting, commissioners reached a consensus on the proposed fees.

They propose charging \$84 per single family residence. Fees for commercial properties will range from \$162 to \$3,125 per year depending on the size of

buildings. Fees for industrial properties will range from \$337 to \$3,125 per year.

Commissioners plan to collect the stormwater maintenance fee through property tax billings. But they say the new fee will not be a tax.

This means tax exempt entities in the city will be charged the fee.

In February, commissioners approved a charter ordinance to exempt the city from portions of the Kansas Water Pollution Act. The ordinance will allow the city to create a

stormwater management program and stormwater utility fee.

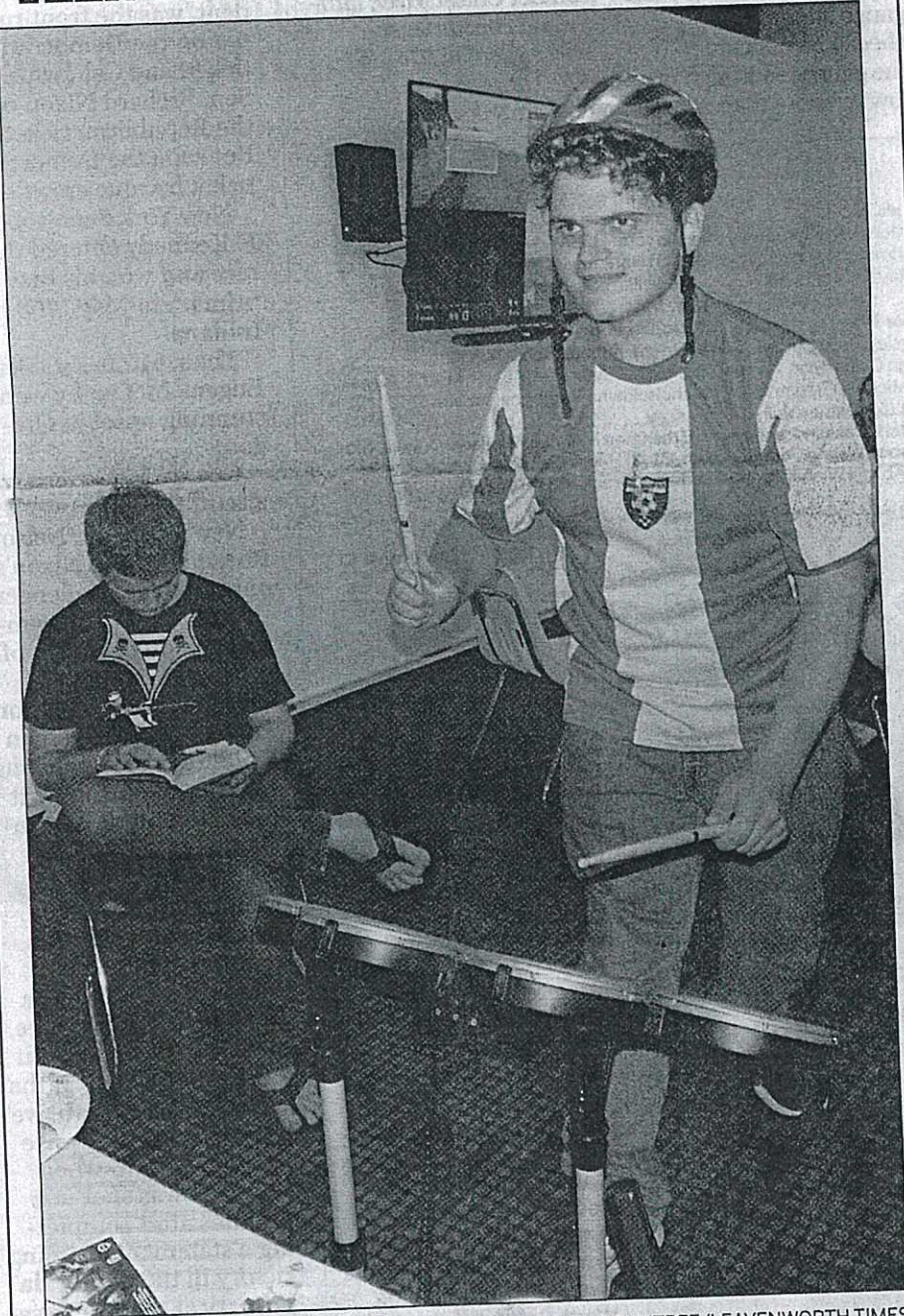
The charter ordinance will not take effect until the end of a protest period, which will expire Tuesday, according to Kramer.

The city manager said commissioners will need to pass an ordinance to officially set the fees.

He said this ordinance may have a first reading May 22. A final vote on the ordinance would come next month.

Twitter: @LVT-NewsJohnR

TEEN SUMMER READING PROGRAM



MARK ROUNTREE/LEAVENWORTH TIMES
Noah Pratt plays a Wii video game during a kickoff party for the Teen Summer Reading Program Tuesday at the Leavenworth Public Library. The program, which encourages summer reading, is for children 12-18 years old.

Linda Miller and her sister, Rosalie Dorrell, are smiling because they were enjoying a day of shopping.

WEATHER

SPONSORED BY
HART'S PAINT AND FLOORING

High: 94 **Low:** 67
Mostly sunny with a south wind of about 10 mph

BULLETIN BOARD

Benefit planned

A Makenna & Brock School Benefit Concert will take place June 16 at the Lansing High School football stadium, 1412 147th St. The country act of Makenna & Brock was featured on the television series "X Factor." The family friendly concert will feature Taylor Lynn Allen as the opening artist.
Tickets and more

LEAVENWORTH CITY COMMISSION

Consensus reached on stormwater fee ordinances

By **JOHN RICHMEIER**
jrichmeier@leavenworthtimes.com

Leavenworth city commissioners have taken additional steps toward implementing fees to generate money for maintenance of the city's stormwater system.

During a special meeting Tuesday, commissioners reached a consensus to advance two ordinances related to the stormwater management program. The ordinances will be brought back to commissioners next week for a final vote.

City Manager Paul Kramer said the first ordinance establishes the program. Kramer said the ordinance lays out the program and the rules and regulations that govern it.

The second ordinance amends the city's schedule of fees to include the new service fees for the stormwater management program.

Owners of single residential properties would be charged an annual fee of \$84. Fees for commercial properties

would range from \$162 to \$3,125 per year depending on the size of buildings. Fees for industrial properties would range from \$337 to \$3,125 depending on the size of buildings.

The fees will appear on annual property tax bills.

According to one of the proposed ordinances, the stormwater management service fees would be subject to the same interest and penalties imposed for the late payment of property taxes and can result in liens.

Commissioners began looking last year at possibly implementing a fee to pay for repairs to the city's stormwater system, which carries rainwater away from buildings and roads. The water is channeled into creeks and watershed areas.

City officials say they have identified more than \$83 million in needed maintenance to the stormwater system.

In February, commis-

ouncement was made

CONSENSUS

Continued from A1

sioners approved a charter ordinance to exempt the city from portions of the Kansas Water Pollution Act.

That earlier ordinance allows the city to create a stormwater management program and stormwater utility fee.

Even though the fees will appear on property tax statements, city officials say the fees will not be a tax. This means tax exempt entities in the city can be charged the fee.

Kramer said the City Commission has the authority to review fees at any time.

"We typically do it annually," he said.

But he said commissioners can review and change an ordinance at any time.

Tuesday's special meeting followed a study session of the commission.

*Twitter: @LVT-
NewsJohnR*

Colette Kiszka

From: Mike McDonald
Sent: Wednesday, February 14, 2018 2:09 PM
To: Colette Kiszka
Subject: FW: Hand out, Brochure & Spring Cleanup location
Attachments: Brochure insert.pdf; Hand out.pdf

From: Tanya Washington
Sent: Wednesday, February 14, 2018 2:06 PM
To: Mike McDonald
Cc: Curtis Marks
Subject: Hand out, Brochure & Spring Cleanup location



Hello and good afternoon,

I have attached the brochure that is inserted with the trash bags. Also, please find attached the handout that Wendy created for the new residents that come in after they have started water & trash service.

I have confirmation from Melissa Bower that Spring Cleanup will be at **Richard Warren Middle School** this year.

Please let me know if you have any questions.

Thank you,
Tanya Washington
Administrative Clerk- Solid Waste/Garage
Municipal Service Center - City of Leavenworth
Phone: 913-682-0650 Fax: 913-682-0282
"Cultivate a lifestyle of Thanksgiving!"

From: Melissa Bower
Sent: Monday, February 26, 2018 3:06 PM
To: City Employees
Subject: This Week: Feb. 26, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- The City is in the process of gathering volunteers for the annual Citywide Spring Cleanup. The event will take place Saturday, April 7. Each year, more than 1,000 volunteers pick up trash throughout the City. Sign-up forms are available on the City's website here and due at the end of this week for those who would like a free t-shirt: <http://www.lvks.org/topic/index.php?topicid=10>
In addition to the trash pickup, there will be free paper shredding sponsored by Citizens Savings and Loan on Saturday, April 7. It will take place:
 - 10 a.m. – 12:45 p.m. at Citizens Savings and Loan, 5151 S. Fifth St. April 7
 - 1 – 2 p.m. at Citizens Savings and Loan, 312 S. Fourth St. April 7The Municipal Service Center will have a Household Hazardous Waste disposal from 8 a.m. to noon, large item drop-off from 8 a.m. to 4 p.m., Recycling Center hours from 8 a.m. to 4 p.m. and free brush drop off for Leavenworth residents at the Brush Site, 1803 S. 2nd St. from 8 a.m. to 3:50 p.m. on Saturday, April 7.
- The City of Leavenworth celebrated the retirement of Kevin Valencia, Driver/Operator at the Leavenworth Fire Department last week. Valencia has been with the fire department for 27 years and officially retired in December. Thank you for your service!



Melissa Bower, Public Information Officer
City of Leavenworth, Kansas
781-3-680-2610
melissab@firstcity.org
www.lvks.org
<https://www.facebook.com/CityofLeavenworthKS/>

From: Melissa Bower
Sent: Monday, April 02, 2018 9:52 AM
To: City Employees
Subject: THIS WEEK: April 2, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- The Leavenworth Citywide Spring Cleanup is this Saturday! We will meet for a kickoff ceremony 8:30 a.m. at Warren Middle School April 7. Then our volunteers will pick up trash throughout the City. A special thanks to everyone helping me with the kickoff ceremony. I could still use a few more grown-ups for about an hour that day if you'd like to assist.
 - Also taking place for the cleanup:
 - Recycling Center at Leavenworth and Haldeman streets will be open 8 a.m. to 4 p.m.
 - Household Hazardous Waste may be dropped off behind the Service Center, off Pennsylvania Street and Lawrence Avenue, 8 a.m. to noon
 - Large item drop off (furniture, metals, mattresses) off Pennsylvania and Lawrence Avenue, 8 a.m. to 4 p.m.
 - Brush Site, 1803 S. 2nd St., is open 8 a.m. to 3:50 p.m. for Leavenworth residents to drop off brush and other yard waste.
 - Open to all: Citizens Savings and Loan is sponsoring free paper shredding for the community. It's an easy way to get rid of old bills, financial statements or other documents that could be used for identity theft if thrown in the trash. The paper shredding truck can accept Document shredding is taking place:
 - 10 a.m. – 12:45 p.m. at Citizens Savings and Loan, 5151 S. Fifth St. April 7
 - 1 – 2 p.m. at Citizens Savings and Loan, 312 S. Fourth St. April 7
- The Leavenworth Parks and Recreation Department has several summer job opportunities listed, including temporary park laborers, Wollman Aquatic Center cashier and recreation workers.
<http://www.lvks.org/egov/apps/document/center.egov?view=item;id=4448>

Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

KANSAS TODAY

LEAVENWORTH

USM professor to talk about celebrity influence

The University of Saint Mary hosts "Celebrity Influence: Politics, Persuasion and Issue-Based Advocacy" with USM's Mark Harvey at 6:15 p.m. April 17 in Leavenworth and 6:15 p.m. April 18 at USM's Overland Park campus.

Both presentations are free and open to the public.

Harvey, USM's director of graduate and undergraduate

business programs at Overland Park, will discuss celebrity advocacy in an attempt to determine the nature of celebrity influence. Focusing on two specific kinds of power – the ability to spotlight issues in the media and to persuade audiences – Harvey will detail recent case studies demonstrating what can happen when celebrities advocate on political issues.

"For quite some time, the media has been virtually obsessed with every celebrity advocating a pet cause," explained Harvey. "Now, we have a reality show star who rode his pet cause, questioning the citizenship of a sitting president, all the way to the White House. If there was ever a clear separation between politics and entertainment, that wall has been shattered."

Citywide Spring Cleanup slated for Saturday

By JOHN RICHMEIER
jrichmeier@leavenworthtimes.com

Hundreds of volunteers will be picking up trash Saturday around the city of Leavenworth.

About 900 people have signed up for this year's Citywide Spring Cleanup.

The annual event is organized by the city of Leavenworth.

Church groups, Scouts and other groups from the community will be picking up trash in public areas of the city. The groups are assigned specific areas of the city.

"They're all over the city," said Melissa Bower, public information officer for the city of Leavenworth.

She said there are still some areas of the city that need to be covered. People who have not signed up but are interested in participating can attend a kickoff ceremony Saturday morning. City officials will have a map of areas

of Leavenworth that still need volunteers.

The kickoff ceremony will begin at 8:30 a.m. Saturday at Warren Middle School, 3501 New Lawrence Road.

Bower said the city will provide garbage bags and gloves for the volunteers who will be participating in the Cleanup. Volunteers also will receive T-shirts and one-day passes for the Wollman Aquatic Center.

Other services will be offered free of charge Saturday as part of the Citywide Spring Cleanup.

Leavenworth residents will be able to drop off large items such as furniture, metal items and mattresses for disposal. This service will be offered from 8 a.m. to 4 p.m. in the area of Pennsylvania and Lawrence avenues.

Leavenworth residents will be able to drop off household hazardous waste free of charge from 8 a.m. to noon. in the area of Pennsylvania and Lawrence avenues.

NURSERY

Continued from A1

sky's the limit," Jensen said. "It is true and I now use that same phrase with the employees. I don't tolerate bad attitudes because it can spread and bring other employees down."

Jensen has been working at the new business seven days a week since June 1 in preparation of opening this spring. There's a grand opening ribbon cutting event scheduled for April 26 at 11:30 a.m. Guests will see more than 100 varieties of evergreen and deciduous trees including a great selection of fruit trees and bushes as well as beautiful accessories for the home. Events through the grand opening weekend include a chance to win a \$100 gift certificate.

Oak Creek offers one-stop shopping for any-

las, irrigation and expert lawn care.

"One of the biggest trends right now is creating an outdoor kitchen space," said Jensen.

"Once people see how beautiful that is, they also want to add a fire pit and landscape lighting as well."

Jensen bought the Oak Creek land from an elderly couple. With the help of friend and Oak Creek Vice President of Operations Angie Hundley, the pair began to visualize how the business would look. What sold Jensen on the property was the large trees, which he knew would be perfect to provide some shade for his nursery stock during hot midwestern summers. He strategically kept some of the largest trees and planned the nursery layout around those. In addition, the pair loved the fact that a spring-fed creek borders the prop-

erty. "I want to be a driving force to decide how everything gets done," Jensen said. "I give her all of the credit when it comes to that."

In addition to all of the services, trees and bushes it offers, Oak Creek also will stock annuals, perennials and hanging baskets with plenty of color as soon as weather warms up. The business also can special order any sort of stone with a saying, sports team, college or last name to add as a landscape feature.

As impressive as the new business is, Jensen isn't taking a breather quite yet. Based on the past five years, he sees his business tripling in the next three years.

"The lawn care and nursery business is tough. You work your butt off every single day. I'm the first one here and the last to leave each day because I love it" said Jensen.

Your re

Who could believe such statements

If a modern-day detective were called to explain the empty tomb of Jesus, they would certainly conclude that something either supernatural or sinister had taken place.

Some say that the women went to the wrong tomb. But would the disciples have made the same mistake later?

If Jesus had not risen, wouldn't it have made sense for the Jewish authorities to exhume his body and place it on display?

Some say that the disciples came and stole his body from the tomb. Does that make any sense?

Some say that Jesus didn't really die – he was just unconscious. So, you're telling me that, after hours of hanging on the cross, having his side pierced with a spear (from which a mixture of blood and water flowed), he then regains consciousness beside the tomb, undressed, in his grave clothes, pushes the stone away from the entrance, overpowers the Roman guards



Leavenworth Citywide Spring Cleanup

April 7, 2018

Help the community pick up all the trash in the City of Leavenworth in one day. Here's how YOU can make a difference:

- > Teams of volunteers will sign up to pick up trash in assigned areas
- > Sign up sheets due March 5 (see form)

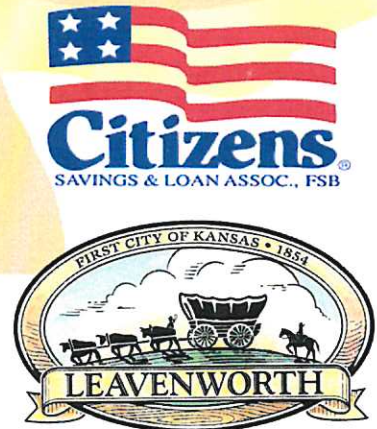
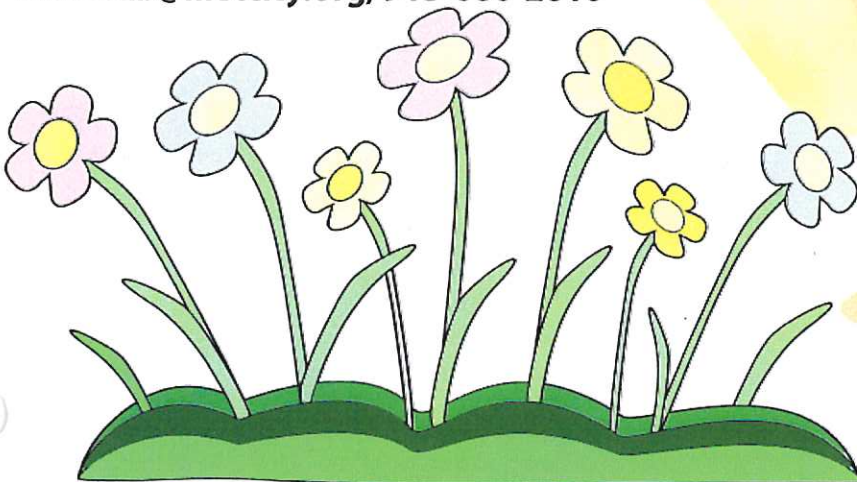
Paper Shredding sponsored by Citizens Savings and Loan. Open to all:

- + 10 a.m. to 12:30 p.m. at Citizens Savings and Loan, 5151 S. Fourth St.
- + 1 p.m. to 2 p.m. at Citizens Savings and Loan, 312 S. Fifth St.

For City of Leavenworth residents:

- Off Pennsylvania Street and Lawrence Avenue:
 - Household Hazardous Waste disposal from 8 a.m. to noon
 - Large item drop off 8 a.m. to 4 p.m.
- Recycling Center 790 Thornton open 8 a.m. to 4 p.m.
- Brush Site, 1803 S. 2nd St., open 8 a.m. to 3:50 p.m.

Contact Melissa Bower, Public Information Officer, City of Leavenworth
melissab@firstcity.org, 913-680-2610



From: Melissa Bower
Sent: Monday, April 09, 2018 10:03 AM
To: City Employees
Subject: THIS WEEK: April 9, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- We had a fantastic turnout for the Leavenworth Citywide Spring Cleanup despite the cold on Saturday. Some teams are planning to pick up their trash later on throughout the week. Please be cautious when driving and let us know if you see any of the filled gray trash bags around town, they are from the cleanup. Thanks to everyone who helped us on Saturday!



- If you're interested, the City Commission goal-setting video is on the City's YouTube page here: https://www.youtube.com/edit?o=U&video_id=mlsygfpWWHE Feel free to share with our constituents. It is a four hour video, but I bookmarked time stamps listed below the video by topic.
- Congratulations to the Police Department's "Wibs N Warrants and LVs Swinest" who competed in the USP's barbecue competition. Brandon Mance won for best chicken and Kelly Fricke for best chili.



Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

FAST FACT: On this date in 1976 – The Teton Dam in Idaho collapsed.

INSIDE TODAY



Grave marking

Brooks Lyles, past president of the Henry Leavenworth Chapter of the Sons of the American Revolution, presents a wreath at a grave marking ceremony for President Dwight D. Eisenhower. **See A2.**

SMILE OF THE DAY



Mary Kern and her great-granddaughter Alora Kiser are smiling because they are having a good time in downtown Leavenworth.



"It's been a long time."

— Mike McDonald

By JOHN RICHMEIER

jrichmeier@leavenworthtimes.com

The entire length of the Three Mile Creek Trail in downtown Leavenworth has re-opened for pedestrian traffic.

Leavenworth Public Works Director Mike McDonald said the east end of the trail had been closed for about three years.

"It's been a long time," he said.

The trail, which runs along Three Mile Creek, extends from Landing Park, 201 S. Esplanade St., to Haymarket Square, 649 Cherokee St. Despite its name, the trail is only about 0.6 in length, according to the city's website.



JOHN RICHMEIER/LEAVENWORTH TIMES

The east end of Three Mile Creek Trail is open once again following a project designed to stop erosion of a bank of Three Mile Creek.

See TRAIL, A5

Storm produces strong winds

By JOHN RICHMEIER

jrichmeier@leavenworthtimes.com

Bids being accepted by city for solid

ka.
The company identified the workers as Operations Supervisors Craig Burchett of Overbrook and Jesse Henson of Manhattan but did not provide additional details about them.

Westar said equipment with high-pressure steam behind it apparently failed.

Westar said the plant's three coal-fired generating units are shut down while the "full circumstances" are reviewed.

Jeffrey accounts for nearly 26 percent of Westar's total generating capacity.

STORM

Continued from A1

Buchanan said the storm brought pea-size hail and winds of up to 60 mph.

"The wind was the

main factor in the storm," she said.

The storm resulted in some downed trees, mainly in southern Leavenworth County, as well as downed power lines.

"We had a couple of

people without electricity for a few hours," Buchanan said.

The storm also produced, on average, about an inch of rain in the county.

Twitter: @LVT-NewsJohnR

TRAIL

Continued from A1

While the east end was closed, members of the public could access the west side of the trail.

The east side of the trail has re-opened following a project that was designed to address the problem of erosion of a creek bank.

The erosion was occurring on the north bank of the creek be-

tween Esplanade and Second streets.

"It was clear that we needed to do something," McDonald said.

In November, city commissioners approved a bid from Leavenworth Excavating & Equipment Company in the amount of \$332,821 for the bank stabilization project.

The city split the cost of the project with OneGas.

OneGas, which is the parent company of Kansas Gas Service,

owns the land where the erosion was occurring.

Officials with OneGas agreed to pay for 65 percent of the construction costs.

The city is responsible for the remaining 35 percent.

McDonald said some minor work remains for the project.

But the additional work should not require the trail to be closed again.

Twitter: @LVT-NewsJohnR

MEDICAL LODGES

Leavenworth



Stress Less. Smile More.
We make life easy to enjoy!



- Rehabilitation to Home
- Skilled Nursing
- Adult Day Care
- Respite Care

1503 Ohio Street | Leavenworth, KS 66048 | 913.772.1844
www.medicalodges.com

For more information and to arrange a tour of our facility, talk to us today about worry-free living.

Chamber of Commerce recently welcomed McKee Properties as one of its members with a ribbon cutting ceremony at the McKee Lofts. Shown cutting the ribbon is surrounded by family, friends and fellow Chamber members.

SUBMITTED

NTING

CONSTRUCTION WORK



SUBMITTED
ace painting at the
Service Organiza-



JIM BASKAS
Shown is the construction work that has been
done on Three Mile Creek.

the University of California-Berkeley, a male frog that was raised in the lab in water with atrazine preferred to have sex with another male frog and laid eggs that hatched. I have read numerous articles about the presence of female parts in male largemouth bass to the point that there may be only one or two locations in the United States where they could find a fully male bass.

Atrazine is a man-made chemical that is an endocrine disrupter, that is, it disrupts our hormonal system and actually has many more negative attributes than just making males more feminine, including raising the risk of many cancers, effects on the kidneys, etc.

I'm not a scientist with an expertise in any of this, but I can find a lot of information on the internet that is pretty scary. Appar-

the womb. It may not be natural, but that is the way that it is.

I am willing to accept the thought that maybe what I have read online is fake news, but I would like to see some studies done to disprove the theory that atrazine acts as an endocrine system disrupter and has a negative effect on our hormone system. Apparently, though, that is a fact. That is how it was created in the 1950s.

Are the Europeans too sensitive about chemicals in the water? Are they wrong to ban it? What studies are they using to base their ban on atrazine? The federally acceptable levels in drinking water in the U.S. far exceed the laboratory levels studied to disrupt the hormone system in the fetus.

Read about it yourself and make up your own mind about the issue. There is plenty of informa-

From: Melissa Bower
Sent: Monday, April 16, 2018 9:59 AM
To: City Employees
Subject: THIS WEEK: April 16, 2018



**What Employees Should Know
About the City of Leavenworth
THIS WEEK**

- For our constituents who also live within the USD 453 Leavenworth Public School District, the district is planning to hold a mail-in ballot election for a bond issue. The deadline to register to vote is May 24 for those not already registered. The Leavenworth County Election Office will mail out the ballots the next day. They are due back to the election office by noon June 15. Feel free to share this website with anyone looking for more information about the election:
https://www.usd453.org/apps/pages/index.jsp?uREC_ID=1140505&type=d&pREC_ID=1404753
- The Leavenworth County Transfer Station, 24967 136th Street, Lansing, KS, is hosting its annual cleanup from now until April 28. It is available to all Leavenworth County residents to bring items like household hazardous waste, recycling, construction/demo waste, residential tire disposal, household appliances and metal and yard waste. The facility is open 8 a.m. to 3:45 Tuesday through Friday and from 8 a.m. to 1:45 p.m. on Saturday.
- The City's newsletter, "First City Connection" summer 2018 edition went out to Leavenworth residents last week. It can be found online here: https://issuu.com/melissabower/docs/summer2018_first_city_connection
Wollman Aquatic Center is scheduled to open on Memorial Day, May 28. Open swim begins at 1 p.m. Fees and hours for the facility are listed on page 15.

Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

MEMORANDUM

TO: Paul Kramer, City Manager

CC: Mike McDonald, Public Works Director
Curtis Marks, Superintendent City Operations
Taylour Tedder, Assistant City Manager

FROM: Melissa Bower, Public Information Officer
Steve King, Solid Waste Foreman

SUBJECT: Spring Cleanup 2018 After Action Review

DATE: April 17, 2018

The Citywide Spring Cleanup was held Saturday, April 7, 2018 at Warren Middle School. About 920 volunteers signed up to receive a free t-shirt for picking up trash, however because of the colder weather not everyone picked up trash that day. Some groups opted to pick up trash on a different day or throughout the following week.

Temperatures were around 20 degrees the morning of the event.

Volunteers were provided with a free t-shirt, free one-day pool pass to Wollman Aquatic Center, gloves and trash bags to pick up trash. This year the City also had a request to provide trash grabbers for older volunteers who had trouble bending over or who were confined to a wheelchair.

The City spent around \$80 for several trash grabbers that were later returned to us and given to the Parks and Recreation Department.



Members of the First Presbyterian Church picked up trash for the Citywide Spring Cleanup April 7 in spite of the 20 – degree weather.

Citizens Savings and Loan continues to sponsor free paper shredding for the community. One truck from Iron Mountain was on site from 9:30 a.m. to 12:45 p.m. at the 5151 S. Fourth Street location and from 1-2 p.m. at the Fifth Street bank location. Volunteers from the bank assisted residents by pulling out boxes and bags of paper from their vehicles and taking them to the shredding truck. The City counted 112 vehicles using the shredding truck. Anyone can use the free shredding services regardless of residency. The bank staff members were enthusiastic about the event and told us they receive hundreds of calls each year about the free paper shredding, often from older residents who have no other option to get rid of personally-identifying information that



Community members bring paper to shred at Citizens Savings and Loan April 7 for the Citywide Spring Cleanup.

could be used in identity theft if not destroyed. The City and Citizens Savings and Loan split the cost of a paper shredding truck for \$1,200.

Solid Waste staff supervises several free services to residents on Spring Cleanup Day:

- 87 residents used the brush site for \$1,727.59 worth of loads and 210 cubic yards of organic waste.
- Recycling Center was open 8 a.m. to 4 p.m.
- Vehicles used the large item drop-off, hours were 8 a.m. to 4 p.m..
- City staff coordinated with the Leavenworth County Transfer Station for a free household hazardous waste disposal behind the Municipal Service Center from 8 a.m. to noon. 33 gallons of HHW were collected including 17 gallons of paint.

Personnel costs were \$1,727.59.

The Solid Waste Division provided manpower by staffing 10 collectors/equipment operators, 1 at the brush site, 2 at the

shredding sites and 1 at the Recycling Center. Two collectors from Leavenworth County worked with the household hazardous waste collection.

The City spent \$4,000 on t-shirts, \$140 on gloves and \$200 on trash bag liners. The liners are a different color than most trash bags so we can identify them as being part of the Spring Cleanup when staff pick them up. The City purchased 70 dozen doughnuts, coffee, milk and juice for the event. Usually this is about the right number, but because of the cold we had a smaller turnout. Staff and elected officials graciously shared the leftovers with emergency crews working that day and at the paper shredding event.

For the second year, Leavenworth Public Schools USD 453 waived its fee for use of a school for the City's kick-off event and provided a janitorial staff member to help with equipment set-up and cleanup.

Recommendations:

This continues to be a popular and successful event for the City. This year showed a slightly lower turnout even before we knew there would be colder weather. It's possible the earlier timeframe affects interest in the event. Our highest volunteer numbers have always come when it is held in mid-April. During the sign-up phase it is difficult to contact all of our groups, but it might be useful to talk to those groups in person earlier in the year.



Boy Scout Troop 176 picks up trash along Three Mile Creek on March 31 as part of the Citywide Spring Cleanup. Teams were allowed to choose their preferred time to pick up trash.



The City buys trash can liners of a certain color so that trash from the cleanup can be easily identified. This helps staff know trash was not illegally dumped.

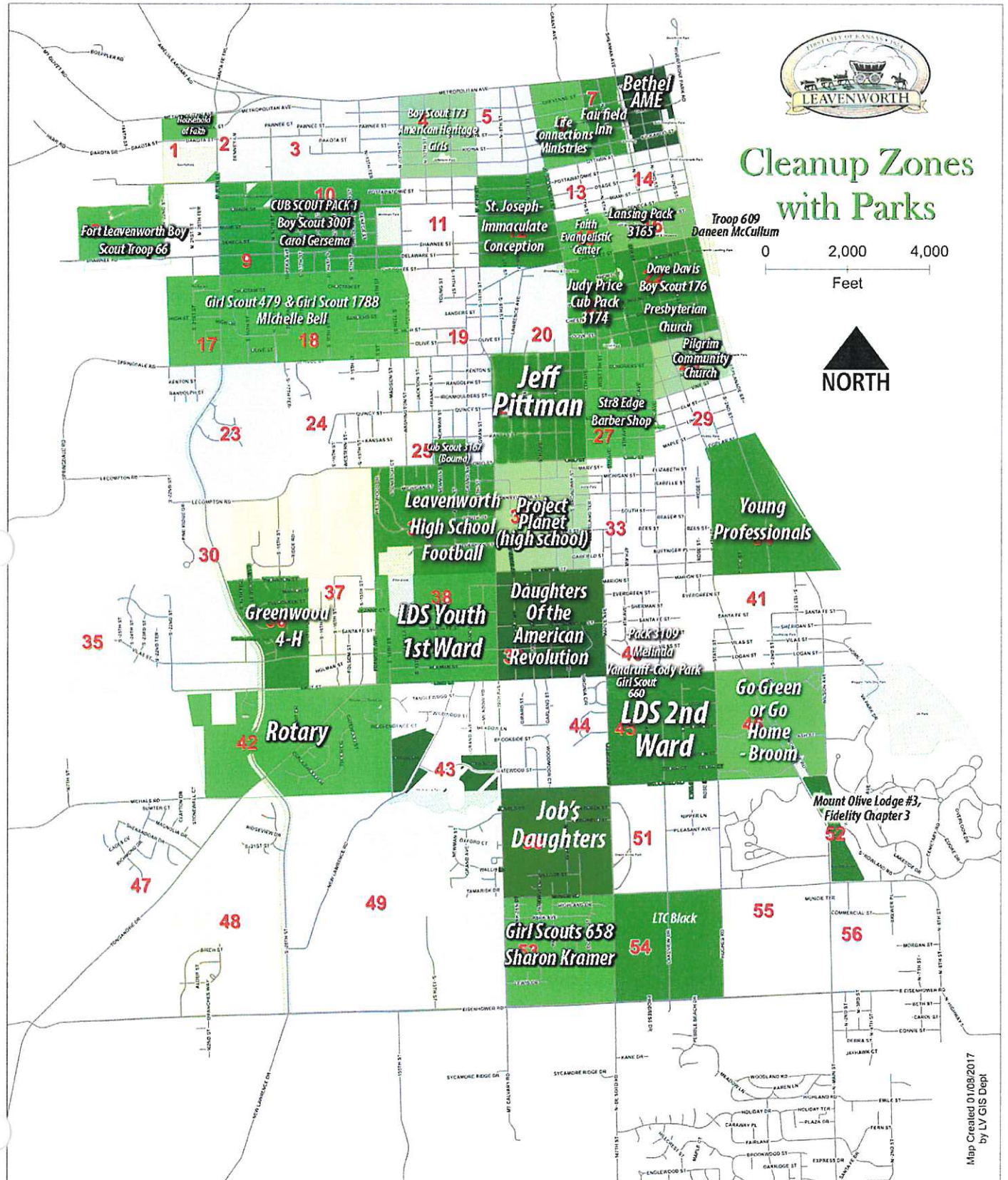
2018

Legend
Parks

City of Leavenworth Spring Cleanup



Cleanup Zones with Parks



BMP I

Colette Kiszka

From: Melissa Bower
Sent: Wednesday, April 18, 2018 4:23 PM
To: Colette Kiszka
Subject: FW: Kids recycling feild trip
Attachments: 20180418_102102_HDR.jpg; 20180418_102103.jpg; 20180418_102106_HDR.jpg

Not for public release, these are internal only for the stormwater report.

From: Steve King
Sent: Wednesday, April 18, 2018 10:58 AM
To: Melissa Bower
Subject: Kids recycling feild trip

Today Lisa Watson brought her class of preschoolers from Osage School Age Center on Fort Leavenworth to the Municipal Service Center to learn about recycling. We showed them Street Sweeper, our newest Trash Truck, and all the children brought a bag of recyclables which they separated into the proper bins. The kids seemed to have a lot of fun despite the wind biting a bit.

Steve King
Solid Waste Foreman



30 Thornton Street
(913)758-6616

From: Melissa Bower
Sent: Monday, April 23, 2018 10:00 AM
To: City Employees
Subject: THIS WEEK: April 23, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- As part of its **annual Arbor Day celebration**, the City of Leavenworth and Richard Allen Cultural Center and Museum will plant a tree in honor of its former director, Phyllis Bass, 11 a.m. Friday April 27 at the museum, 412 Kiowa Street. City staff and the public are invited to this event. Please note it is an hour earlier than originally published in the First City Connection newsletter.
- The Fort Leavenworth Post Wide Yard Sale is this weekend, 8 a.m. to 3 p.m. Saturday, April 28. It's considered an "installation event" so visitors without an ID card do not need to go through the Visitor Center. However, they suggest delays at the front gate for security checks and vehicle inspections. More information can be found on the garrison website, <https://garrison.leavenworth.army.mil/index.php/my-fort/all-services/gate-information>
- The cherry blossoms at North Esplanade Park are in bloom. They honor the Sister City partnership between Leavenworth and Omihachiman, Japan.



Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

From: Melissa Bower
Sent: Monday, April 30, 2018 10:10 AM
To: City Employees
Subject: THIS WEEK: April 30, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- Water Pollution Control staff hosted sophomores from the integrated science classes at Leavenworth High School last week for tours of our plant. The students were very interested in how the City treats wastewater and go the opportunity to see science at work in our community. Instructor Michelle Loeffler writes: "Great day learning about how our city treats wastewater. Thanks to Leavenworth Waste Water Plant employees as #LHS students saw what they learned in class in practice"



- The City and Richard Allen Cultural Center and Museum planted an Eastern Redbud tree in honor of Phyllis Bass, longtime director of the museum, last Friday. It was a well-attended event and beautiful weather. Our Parks and Recreation staff facilitate a special tree planting every year on Arbor Day, and also offer a Legacy Tree Program for anyone who would like to commemorate a special person with a tree in our public parks. A \$200 fee pays for a tree, plaque and a replacement tree if necessary. Forms are available through the Parks and Recreation office.
- Touch-a-Truck is 10 a.m.-11:30 a.m. Wednesday May 2 at Leavenworth Landing Park. This Parks and Recreation event is free and open to all. It's geared for young children to see and touch some of the vehicles working in our community, such as our fire trucks, police cars, trash haulers, cement mixers and more. There will be bounce houses and popcorn in the Riverfront Community Center gym.

Melissa Bower, Public Information Officer
City of Leavenworth, Kansas
913-680-2610
melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

From: Melissa Bower
Sent: Monday, May 07, 2018 1:07 PM
To: City Employees
Subject: THIS WEEK: May 7, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- Tomorrow (Tuesday May 8) before the City Commission meeting, there will be an informational meeting for the public about the new stormwater system management program. It's not a set presentation, so members of the public may come and go as they please. The meeting will be from 6-7 p.m. As a reminder, this is one of three meetings we have had for the public, not including the discussions over the last year during City Commission meetings. (City Commission meetings are always open to the public.) On our website, there is a series of photos detailing some of the \$83 million worth of stormwater problems that engineers have identified, the boards that will be shown at the public meeting, and fees proposed by the Commission.
- Leavenworth Parks and Recreation hosted our popular "Touch a Truck" last Wednesday and it was very well-attended. Thanks to all the City staff who participated: Police, Fire, Solid Waste, Streets, WPC, Animal Control and others if I've forgotten. The children had such a wonderful time seeing all the trucks we use to do work throughout the City.



- Former Leavenworth Police Officer E. Clay Thompson was honored in a statewide ceremony last week and had his name added to the Kansas Law Enforcement Memorial honoring officers who have fallen in the line of duty. Officer Thompson was killed Oct. 28, 1925 in a vehicle accident in Leavenworth while on the job. His name was inadvertently left off a list when the memorial was built, but discovered by a local historian. The memorial is on the grounds of the Kansas State Capitol in Topeka so that all Kansas can remember and honor fallen police officers.

Michael Stephan

From: Melissa Bower
Sent: Monday, May 14, 2018 10:09 AM
To: City Employees
Subject: THIS WEEK: May 14



What Employees Should Know About the City of Leavenworth **THIS WEEK**

- Wollman Aquatic Center at 13th and Shawnee streets opens for the season Monday, May 28 (Memorial Day). Open swim is 1-7:30 p.m. 7 days a week throughout the season. More information about swim programs can be found in the City's summer newsletter, which is online here: https://issuu.com/melissabower/docs/summer2018_first_city_connection
- The 46th Annual City Tennis Tournament is taking place over Memorial Day weekend at David Brewer Park. Participants must live or work in Leavenworth County or be a former champion. Sign-up online is here: <https://www.lvks.org/egov/apps/payment/center.egov?view=form;page=1;id=37>
- Contractors have finished the new road for the new Business and Technology Park along Eisenhower Road and are installing sidewalk trails and finishing a landscaping berm and plan to have the project completed this summer.



- From Mrs. Brice at David Brewer Elementary School: 60 David Brewer Kindergarteners got to spend a little piece of their Thursday afternoon helping our community look better. They picked weeds at the David Brewer Park sand volleyball court. They all helped to either hold trash bags and/or pull weeds. This was the Kindergarten classes' Spring Community Service Project. The Kindergarteners were proud that they got to help make our community look better.



Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>



**POLICY REPORT PWD NO. 18-05
REVIEW OF THE 2017 LEAF COLLECTION PROGRAM**

January 16, 2018

Reviewed by:



Michael G. McDonald, P.E.,
Director of Public Works

Reviewed by:



Paul Kramer,
City Manager

ISSUE:

Review of the 2017 Leaf Collection Program.

BACKGROUND:

The City of Leavenworth operated a curbside Leaf Collection Program believed to have started in the mid-1960s through the late 1980s. In 2007, the City Commission directed staff to restart the program beginning in 2008. In early 2008, the City purchased two 20-yard leaf machines and began leaf pick up on November 3, 2008. The program as planned would consist as follows:

- The two leaf collection units would be pulled behind existing equipment, and utilize the brush disposal site with two crews, six people total plus supervision and administration.
- Start loose leaf pick up in mid-November and work until mid-December through the City in a systematic pattern.
- Coordinate with the public using the ten-grid maintenance map as the basis of operations through the Public Information Officer.
- Strive for at least two trips through each grid.
- All existing methods of leaf disposal would still be available, i.e.:
 - Refuse pick up of bagged leaves
 - Free disposal of leaves at the brush disposal site

The restart of the program has not been without issues. Key events are noted below.

- 2008 – the entire City was picked up twice, but took longer than anticipated
- 2009 – only 6 grids were completed due to heavy leaf drop and weather conditions
- 2010 – only half the City was completed due to weather and equipment failures

In 2010, it became apparent that due to leaf drop quantities, equipment limitations, time constraints, and weather, leaf pick up for the entire City was not feasible. In 2011, staff initiated the policy of leaf pick up in half of the City, North of Spruce St. that year, and South of Spruce St. the following year, and continuing to alternate through subsequent years.

The City Brush Site is approved by the Kansas Department of Health & Environment for a ½ acre compost site. All leaves from the Leaf Collection Program and resident drop off are used for the composting. The last 4-year span has provided an average each year of:

- 1,247.75 tons of leaves Leaf Collection Program
- 687 residents used the leaf drop at the Brush Site

The current equipment is now nine years old; maintenance and repair costs are becoming an issue. Since the purchase of the equipment in 2008, the City has spent \$19,135.18 on one unit and \$18,564.52 on the other unit. Original purchase price for the two units was \$59,800.

The 2017 program was concluded with minimal issues. Staff reevaluated some procedures used by the crews working with the machines and routing within the grids that proved to be successful. All areas were picked up at least twice between November 6th and December 5th.

Staff "pre-ordered" known failure-prone components in an effort to reduce downtime in 2017. \$6,100 was spent on repairs this year which involved six days of downtime and/or only using one machine.

Some discussion has arisen regarding a program revision to include the entire town. Based on nine years of experience, staff is certain this cannot be reliably achieved using the existing machines and personnel levels. The City would need to purchase two or three larger new machines. Current machines are 20-cubic yards each; it is recommended that new machines be at least 30-cubic yards. This increases the volume collected between unloadings as well as provides greater intake vacuum power. The price for new 30 cubic yard leaf machines is \$64,500 each. The two existing machines could be used as backup to eliminate downtime during the leaf pickup process.

It is anticipated that additional staffing is necessary even with new machines to complete the grids for the entire City within the mid-November to mid-December timeframe. It is also important to note that the number of inmate laborers used to assist the City has decreased over the years. These workers were used on the leaf collection crews. Typically six to eight persons were available each day ten years ago; however, usually only one or two persons are available daily for the last two years. To reliably meet the goal of citywide collection at least twice per year, it may be necessary to assign employees from other departments to assist with leaf collection.

RECOMMENDATION

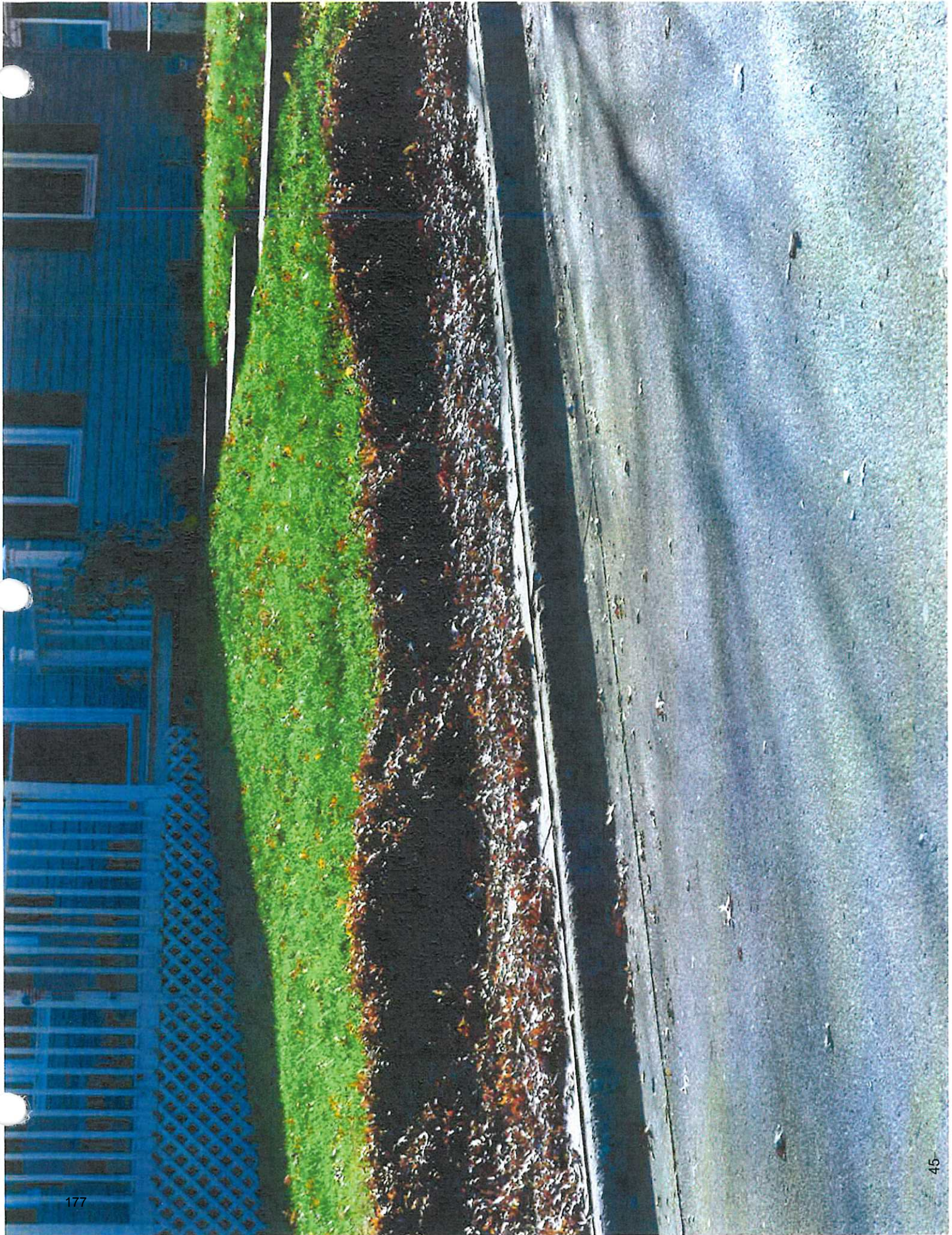
Staff recommends the Commission provide guidance on future direction of the program to facilitate planning 2018 Leaf Collection Program including equipment purchases and personnel assignments.

ATTACHMENTS:

Leaf Pick Up Pictures









From: Melissa Bower
Sent: Monday, October 08, 2018 11:06 AM
To: City Employees
Subject: THIS WEEK: Oct. 8



What Employees Should Know
About the City of Leavenworth
THIS WEEK

- The City of Leavenworth will offer curbside leaf pickup to residents from Spruce Street to Eisenhower Road in 2018. This program is weather dependent. It is scheduled to begin Nov. 5. Curbside leaf pickup is offered to half the City each alternating year. For example, in 2017 the City offered curbside pickup to the northern half, in 2016 the southern half. This is done to meet the quick turnaround of leaf pickup and unpredictable Kansas weather.

Residents who are not on the collection route:

- Can bag leaves for regular garbage collection or
- Take leaves to the Brush Site, 1803 S. Second St., for free disposal. Hours for the site are Tuesday through Saturday, 8:30 a.m. to 3:50 p.m. until the last day of November. Clippings at the brush site are used for making compost. The compost is available to residents free of charge at the brush site.
- The City of Leavenworth is seeking qualified, motivated applicants for Solid Waste Collector. Minimum Qualifications: Graduation from HS or GED equivalent; possess a current valid driver's license; be able to work flexible schedule as needed to complete a 40 hour workweek, M-F; be able to obtain a CDL license within 120 days; 6 months experience in the operation of trucks and other light automotive and non-automotive equipment and a minimum of 6 months physical labor experience. All our jobs are posted at www.lvks.org/jobs or the Leavenworth Workforce Partnership Center, 515 Limit St., Suite 200.
- Contractors working for the City of Leavenworth have CLOSED one block of Seventh Street between Pawnee and Dakota streets for sewer repair. Work is expected to last several weeks. All work is weather permitting. This is the street that flows into Grant Gate on post.

Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

From: Melissa Bower
Sent: Monday, December 03, 2018 10:08 AM
To: City Employees
Subject: THIS WEEK: Dec. 3, 2018



What Employees Should Know About the City of Leavenworth **THIS WEEK**



- The City is starting up its leaf program again this week. Our machines are unable to pick up leaves when they are covered in snow. We will have two leaf machines running, beginning north near Spruce Street and working their way south through the neighborhoods.
- The Parks and Recreation Department hosted a successful Breakfast with Santa last weekend and will have a "Rudolph's Red-Nose Run" on Saturday Dec. 8. Sign up by Dec. 4 for a lower fee. Registration is online here: <https://enter2run.com/Race/KS/Leavenworth/GrindersHighNoonRudolphRedNoseRun> Runners may choose from a 5K or 7.2 mile run through downtown Leavenworth. Race begins at noon at the Riverfront Community Center next Saturday.
- The City's Winter/Spring 2019 newsletter is now online. Content includes sign-up dates for summer youth softball and baseball, the City's snow and ice procedures, fire safety tips and more https://issuu.com/melissabower/docs/winterspring_2019_final

Melissa Bower, Public Information Officer

City of Leavenworth, Kansas

913-680-2610

melissab@firstcity.org

www.lvks.org

<https://www.facebook.com/CityofLeavenworthKS/>

<https://twitter.com/LeavenworthKS>

View videos of the Leavenworth City Commission at <https://www.youtube.com/user/leavenworthkansas>

STORMWATER MANAGEMENT PROGRAM 2018

Waste Water Treatment Plant / Water Pollution Control Summary

On April 25 and 26, the Wastewater Treatment Plant was host to 100 biology students from Leavenworth High school. The students were given a walk-around tour as well as a display of the equipment used to take care of the collection system that included the camera truck and our new cleaning truck.

Wastewater Treatment Plant employees sprayed Fusion to kill only Johnson grass along the creek bank in front of the plant to maintain the vegetation planted to keep the creek bank from eroding during a rain event.

In 2018, the Wastewater Treatment Plant inspected 1.2 miles of stormwater lines using closed circuit television equipment. The Water Pollution Control (WPC) also performed some pole camera on request from City Hall for storm lines at three locations: 3rd & Delaware, 746 Spruce, and 2908 MLK Drive.

Water Pollution Control has adjusted our SSO standard operating procedure to ensure the overflow does not reach the nearby storm drain by purchasing spill blocker that protects the storm drain.

Water Pollution has responded to several illicit discharges in 2018. One location was 524 North 14th. An anonymous caller stated the owner had a pipe on the side of the house and was pumping something towards the creek. This turned out to be a false report.

CITY OF LEAVENWORTH

Kansas Stormwater Annual Report Form for Municipal Separate Storm Sewer Systems

January 1, 2018 – December 31, 2018

Kansas Permit No: M-MO12-SN01

Implementation of a Stormwater Utility with Fee in 2018 Title Summary

A key series of regulations was approved by the City Commission in 2018. These were related to formation of a “Stormwater Utility” with a fee. The discussion of a stormwater utility dates back to at least 1995; however, this effort began in 2017 and continued into 2018. Ultimately eight meetings were held (all being advertised and open to the public) – being a combination of six Commission Study Sessions and two general public information meetings. This effort was also covered in the Leavenworth Times (June 15, 2018).

The Commission approved the program on June 12, 2018. The billings are included as a “fee” on the property tax statements distributed by Leavenworth County. Collections began in January 2019.

Attached Within the 2018 Annual Report:

- Commission Meeting Policy Report, dated June 12, 2018
- Some News Articles
- Copy of Ordinance No. 8077
- Minutes Adopting Ordinance No. 8077

Colette Kiszka

From: Mike Hooper
Sent: Tuesday, February 12, 2019 2:05 PM
To: Colette Kiszka
Subject: Stormwater info

The county sent out tax statements with the stormwater fee to 9,963 properties. The city sent bills to an additional 202 properties that were missed by the county. A total of 39 appeals were requested with 33 resulting in an adjustment.

Colette Kiszka

From: Carla Williamson
Sent: Wednesday, January 10, 2018 12:41 PM
To: Mike McDonald; Paul Kramer
Cc: Mike Hooper; Colette Kiszka
Subject: RE: Stormwater Report - Commission Agenda

I have the annual report for stormwater on for Feb 20 and then resolution on Feb 27th.
I can move to whatever dates work for everyone. I can add another line so we have both items listed.

13. First Consideration Ordinance Chapter 78 Peddlers and Solicitors

Feb 20 Study Session

1. Review Annual Report for Stormwater
2. Semi-Annual Report Leavenworth Public Library (Matt Nojonen 913-682-5666 ext 211)
3. Semi-Annual Leavenworth County Development Corporation (Steve Jack 913-727-6111)
4. Semi-Annual Convention & Visitors Bureau
5. Roads Plan
6. Review RV Ordinance

Feb 27 Regular Meeting

1. February 13, 2018 Regular Meeting Minutes
2. Second Consideration Ordinance Chapter 78 Peddlers and Solicitors

2018 CITY COMMISSION MEETINGS:

3. Resolution B- Annual Report for Stormwater

Mar 6 Study Session

1. Quarterly Report Leavenworth School District (Contact: 913-684-1400 Brenda Sheumaker)

Mar 13 Regular Meeting

Carla K. Williamson, CMC

City Clerk

City of Leavenworth

100 N 5th Street

Leavenworth KS 66048

913-684-0335

From: Mike McDonald
Sent: Wednesday, January 10, 2018 10:30 AM
To: Paul Kramer; Carla Williamson
Cc: Mike Hooper; Colette Kiszka
Subject: Stormwater Report - Commission Agenda

We need to schedule the following for February as the KDHE Annual Report is due Feb 28th

1. Review the draft **KDHE Annual Report** – there is no draft yet – but should be in a week or two
 - a. Consider reviewing at Study Session for comment from the Commissioners and public , 2/6? (or 2/13 or 2/20)
 - b. Approve the report on 2/27
 - c. Send to KDHE on 28th
2. Review the Stormwater Management Plan – not sure if there are any proposed changes at this time. Don't believe there were any changes from last year that we need to include
 - a. Review at study session on 2/6 or 2/20
 - b. Approve any changes on 2/27, would be sent in with the 2018 report in Feb 2019

Mike

Michael G. McDonald, PE

Director of Public Works

City of Leavenworth

100 N Fifth Street

Leavenworth, KS 66048

mmcdonald@firstcity.org

913-684-0375

- Pickup mid-November until mid-December
- Used a 10 grid maintenance map
- Strive for at least two trips though each grid
- 2008 entire City was picked up twice but took longer than anticipated
- 2009 only 6 grids completed due to heavy leaf drop and weather conditions
- 2010 only half the City was completed due to weather and equipment failure
- 2011 initiated the policy of ½ of the City pick up each year alternating North and South areas
- Current equipment is nine years old; maintenance and repair costs rising
- Current discussion to revise program to include the entire town
- Cannot accomplish entire town pickup with the existing machines and personnel levels
- Continuation of the program will require the purchase of two or three larger capacity machines at \$64,500 each
- 2017 staff was able to make two passes of collection
- Discussion about inmate labor; in prior years the City would get 6-10 inmates to use for various labor uses; now only 1-2 per week due to the change in prison make up
- Commissioner Dedeke asked about seasonal workers and county work release program

The Commission would like to see some options regarding the program at a later study session.

- Cost of a 20 yard vs 30 yard leaf machine
- Options on labor and possible grids and entire city vs ½ each year

Update on Stormwater Program – Public Works Director Mike McDonald gave an update on the Stormwater Program. City Manager Paul Kramer gave a brief update on the topic. The City Commission had six previous Study Sessions and two public meetings to discuss this issue. On November 21, 2017 the City Commission had a consensus to put the fee on the county tax statement. At the last meeting on December 5, 2017 a variety of fee structures were provided based on zoning type. No decision was made. A Charter Ordinance will be required to allow the City to setup a Stormwater Program. The Charter Ordinance does not set the specifics of the program. That would be done at a later date through a regular ordinance.

Mayor Preisinger discussed that it has been decided that this program must go forward. The mechanism of how this happens could still be discussed. The Charter Ordinance will take approximately 3 months to complete and does not commit the Commission to anything related to the program.

Commissioner Wilson asked about possibility of having another public meeting to inform residents.

Commissioner Dedeke asked if any consideration would be given to businesses with water retention basins. He is bothered that the fees are fees not taxes and therefore not tax deductible.

Discussion about the problem with a tax vs fee. Many properties that are tax exempt and would not be paying into the program if it is a tax.

Other:

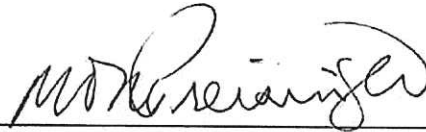
Commissioner Dedeke discussed the MMA event that was held at the Riverfront Community Center on Saturday. The event was a success. Commissioners Wilson and Griswold attended the event and said it was a very good event and a huge success. Mayor Preisinger clarified that the event was a private event that was held at the Community Center and not put on by the City. The individual rented the Community Center after obtaining approval from the Commission per the City Ordinance. The City does not get involved in how any proceeds are distributed.

CONSENT FOR A SPECIAL MEETING OF THE GOVERNING BODY
OF THE CITY OF LEAVENWORTH, KANSAS

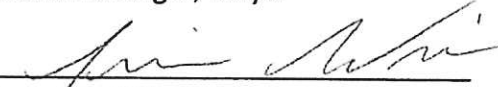
We the undersigned, being a quorum of the duly elected Commissioners of the City of Leavenworth, Kansas, do each consent to a special meeting of the Governing Body of the City of Leavenworth, Kansas, to be held at City Hall, 100 North 5th Street, Leavenworth, Kansas, on the 16th day of January, 2018 for the purpose of:

Study Session:

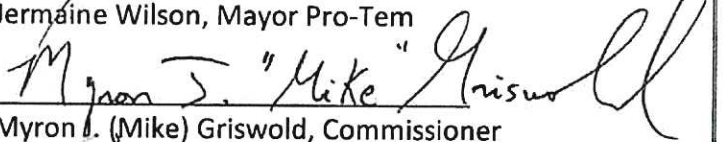
1. Main Street 2017 Annual Review (pg. 2)
2. Review of the Leaf Pick up Program (pg. 41)
3. Update on Stormwater Program (pg. 47)



Mark Preisinger, Mayor



Jermaine Wilson, Mayor Pro-Tem



Myron L. (Mike) Griswold, Commissioner



Larry Dedeke, Commissioner




Nancy D. Bauder, Commissioner

POLICY REPORT PWD NO. 18-04
REVIEW OF STORMWATER PROGRAM AND
ANNUAL FEE
January 16, 2018


Prepared by:


Mike Hooper
Deputy Director of Public Works

Reviewed by:


Michael G. McDonald, P.E.,
Director of Public Works

Reviewed by:


Paul Kramer,
City Manager

ISSUE:

The continued review of the proposed Stormwater Program and proposed stormwater fee.

BACKGROUND:

The City Commission discussed a proposed Stormwater Program at six (6) study sessions (May 2, June 6, July 13, September 5, November 21, and December 5) and two (2) public meetings (at the Riverfront Community Center and Fire Station No. 1) in 2017. Those meetings covered the current status and projected problems with the City stormwater system, stormwater programs in other cities, fee structures, and collection methods. On November 21, the Commission provided a consensus to place a stormwater fee on the county tax statement, rather than include as an item on the monthly Water Department utility bill, as the selected method of revenue collection.

The December 5 meeting involved discussions with the Commission, citizens, and business owners regarding the fee structure. Following Commission direction, staff has worked to create a simple methodology in fee allocation. All properties in the following general categories with a structure would be billed.

- Residential Zones
- Commercial Zones
- Industrial Zones

During the process of establishing fee estimates, staff determined some inequities in the fee structure that was reviewed at the July 18, 2017 Commission Meeting (see attached policy report). It is assumed that the impact of the zoning class upon stormwater quantity and quality is increasingly higher as the zoning moves from residential to commercial and industrial. To address some of the concerns and inequities the revised proposed fee structure has added categories under the commercial and industrial classifications.

The recommended breakdown of property sizes for fee assignments is as follows:

Residential

1. Single Family
2. Duplex/Multi-Family

Commercial

1. Bldgs. 1,500 sq. ft. or less (most downtown businesses)
2. Bldgs. 1,501 to 4,500 sq. ft.
3. Bldgs. 4,501 to 10,000 sq. ft.
4. Bldgs. 10,001 to 20,000 sq. ft.
5. Bldgs. 20,001 to 50,000 sq. ft.

6. Bldgs. 50,001 to 100,000 sq. ft.
7. Bldgs. 100,001 to 200,000 sq. ft.
8. Bldgs. Over 200,000 sq. ft.

Industrial

1. Bldgs. 4,500 sq. ft. or less
2. Bldgs. 4,501 to 10,000 sq. ft.
3. Bldgs. 10,001 to 20,000 sq. ft.
4. Bldgs. 20,001 to 50,000 sq. ft.
5. Bldgs. 50,001 to 100,000 sq. ft.
6. Bldgs. 100,001 to 200,000 sq. ft.
7. Bldgs. Over 200,000 sq. ft.

The attached spreadsheet identifies possible fees for each type/size of structure class in each of the zoning classifications. The current GIS system has been used to create the number of properties with a structure in each category.

The 20-year, 30-year, and 40-year programs are based on the necessary annual funds required to complete the estimated \$85 million dollars of repairs during that specific period. The selection of a planning period is a subjective task, and should be considered more as a guideline toward the effort involved and cost associated with the program. It is to be expected that changes will occur throughout the program that will have an impact on progress. These include:

- Regulatory changes
- Construction methods
- New types and styles of defects develop
- Shifting priorities for focus of the program.

The following are several clarifications that have been inquired about:

1. Properties zoned commercial with both commercial and residential uses (many downtown buildings) will be assigned the Commercial fee.
2. Properties zoned commercial with only residential uses (such as single homes or apartment complexes) will be assigned the appropriate number of residential fees.
3. Industrial and Commercial properties with multiple buildings and/or large parking surfaces are assigned the appropriate single building fee for the lot size.
4. Properties with parking only will not be charged a fee.

ACTION:

Commission discussion on the continuation of the program as outlined at the end of 2017, and discussion about placing a Charter Ordinance enabling future collection of a stormwater fee on first consideration at a future Commission meeting. (The Charter Ordinance does not set the fee or determine classifications or method of collection, it is simply the vehicle needed to enact a second ordinance related to these details at a later time.)

ATTACHMENTS:

Policy Report 17- 40
Fee Spreadsheet

POLICY REPORT PWD NO. 17- 40
REVIEW OF STORMWATER PROGRAM POLICY
AND FUNDING SOURCES
July 18, 2017

Prepared by:

Reviewed by:

Reviewed by:

Mike Hooper
Deputy Director of Public Works

Michael G. McDonald, P.E.,
Director of Public Works

Paul Kramer,
City Manager

ISSUE

Continued review of funding structure for Stormwater Program Policy

BACKGROUND

The discussion at the June 6, 2017 Study Session, reviewed the stormwater fees from numerous Kansas cities. The fee structures ranged from a simple monthly fee (one for residential and one for non-residential) to a little more complex with the inclusion of a multiplier based commonly on a value called an "Equivalent Residential Unit" (ERU) rate.

The discussion and guidance focused on a methodology that was both simple and fair to the residences and businesses in the City. The method of collecting the fee was also reviewed with the Commission.

COLLECTION OPTIONS

1. Staff has had discussions with water department personnel regarding the practice of collecting the fee on the monthly water department billing as is currently done with the trash and sewer charges. It is anticipated that only properties with water meters or refuse service billed by waterworks would be receiving a bill. A number of items and issues associated with using waterworks were identified. They are listed below;
 - The water department is implementing a new internet billing system. *(Any impact to the billing procedure and any additional costs to the City is unknown at this time)*
 - The water department will charge an account set-up fee of \$15,000 - \$20,000 to set up the billing accounts for stormwater and they will also charge a monthly fee in the approximate amount of five percent of monthly revenue (in addition to the fees charged to collect refuse and sewer bills). The set-up work being done by the water department personnel will take approximately four to six months to complete.
 - Income from the fee would be received on a monthly basis. It is expected that failure to pay the fee would be handled by the waterworks through shut-off of the water meter, although that has been in question in the past.
 - The burden of the fee payment would be on the resident, who possibly is not the property owner.
2. The other option discussed for collecting the fee is to place it as a fee on the annual property tax statement which is mailed to the OWNER of any property that has a building. Important details of this method are presented below:

- Fee Collection could be implemented starting January 1, 2018 provided all fees or assessments are certified to the county clerk by the 2nd week in August for inclusion on the December tax statements.
- Income from the fee would be received by the City twice a year. There are no collection fees associated with adding this fee, and failure to pay the fee is handled as a failure to pay taxes by the county.
- This method places the burden of paying the fee on the property owner who may or may not be the resident at that address.

FEE STRUCTURE

In the effort to identify a fee structure that is fair and equitable to the City's citizens and businesses, staff has developed the revenue estimates identified in the spreadsheets on the additional pages of this report. Several broad categories were selected to provide simplicity in application of the fees as expressed by the Commission. The revenue estimates are divided in the categories shown below. Commercial and Industrial fees are based on the square footage of building as shown in the City of Leavenworth GIS.

These categories are applicable to collection of the fee by both waterworks and Leavenworth County.

- **Single Family** (*per housing unit*)
- **Duplex/Multi-family**
(*each housing unit would be billed for the fee, ** example – duplex, 2 housing units x the fee, four-plex, 4 housing units x the fee, six-plex, 6 housing units x the fee, etc.*)
- **Commercial**
 - Units less than 1500 sq. ft. of building footprint (*most downtown businesses*)
 - Units 1500 – 4500 sq. ft. of building footprint
 - Units greater than 4500 sq. ft. of building footprint (*auto dealerships & large box stores*)
- **Industrial**
 - Units less than 6500 sq. ft. of building footprint
 - Units greater than 6500 sq. ft. of building footprint

This method creates different fee structures for housing units (single family & multi-family) vs. the building footprint square footage (commercial & industrial structures).

MANAGEMENT PROGRAM

The implementation of the stormwater fee will require the adoption of a Comprehensive Stormwater Management Program. Attached for review is a draft document outlining the program. The document identifies five program goal activities. The five activities are:

- Address flood problems with drainage improvement projects to reduce the occurrence of property flood damage.
- Review, enact, and enforce ordinances, policies, and design criteria as necessary to manage the floodplain and prevent future flooding.
- Perform routine maintenance of the City's storm drainage system to maintain its intended capacity and condition.
- Enhance water quality to preserve the natural environment while maintaining compliance with the City's Kansas Water Pollution Control Permit
- Provide adequate funding for the Comprehensive Stormwater Management Program.

The implementation of the program will require additional staff to include a project coordinator and additional equipment for the current staff. We anticipate the following activities to occur if the fees are adopted.

1. Within six months after initiation of the fee, the hiring of a project coordinator to facilitate the Stormwater Management Program.
2. Priority ONE beginning at the initiation of the program would be to address the growing list of resident calls who have identified stormwater system issues and orange fence on their properties. *(These locations can be addressed fairly expeditiously through the use of consultants and outside contractors once the funding is established.)*
3. Beginning within eighteen months after implementation, staff anticipates the following additional programs to be under development:
 - **Curb Inlet Replacement Program.** *This would address the failing brick & concrete block curb inlets throughout the City. Most projects can be completed using city staff, although a sufficiently large number of locations will require use of a contractor to complete the work.*
 - **Corrugated Metal Pipe (CMP) Program.** *Identify and prioritize repair of CMP*
 - **Lining Program** – *where dig and replace is not an option or recommended due to pipe condition, depth, and/or location. Projects of this type would be completed by outside contractors.*
 - **Replacement Program.** *This would address the corrugated metal pipe that is in an advanced state of deterioration where lining would not be feasible. Projects of this type would be completed by outside contractors.*
 - **Brick & Stone Arch Replacement Program.** *This would be a proactive program that will address the numerous very old street crossings and drainage structures throughout the City. Projects of this type would be completed by outside contractors.*
 - **Stream Bank & Streamway Resoration Program.** *This would be a proactive program that will address the removal of the brush and trees that are growing along the stream that inhibit the efficient flow of stormwater during peak flow events. Projects of this type would be completed by, city staff, inmate workforce, and outside contractors.*
4. Project priority sheets will be reviewed with the City Manager. It is anticipated that most projects can be addressed within the funding stream created from the fees. Larger or high priority projects may need to compete for CIP funds.

ATTACHMENTS

Sample Fee Structure
Stormwater Fee Zoning Map
Draft Stormwater Management Program

Consider Bids for Police SWAT Vehicle – Police Chief Pat Kitchens presented for consideration the purchase of one SWAT vehicle from LDV Custom Specialty Vehicles in the amount of \$126,063.00. This would be a replacement of the SWAT vehicle purchased in 2000. The Police Department staff prepared specification and sought bids from three different companies and received the following bids:

- LDV \$126,063.00
- Summit Truck Group \$136,570.00
- Summit Bodyworks \$195,830.00

Commissioner Bauder moved to approve the purchase of the SWAT replacement vehicle from LDV in the amount of \$126,063.00. Commissioner Griswold seconded the motion and was unanimously approved. The Mayor declared the motion carried 5-0.

Consider Sole Source Bid for a Laser Scanner for Police Department – Police Chief Pat Kitchens presented for consideration the approval to purchase one 3D HW LS Focus 70 Laser Scanner from FARO Technologies, Inc. in the amount of \$44,548.23. The sole source is requested due to the specific nature of the technology and the ability to be involved in a user group with other law enforcement agencies in the region that use the same equipment. Additionally the technology will allow the incorporation of our drone(s) to further enhance the information collected.

Commissioner Bauder moved to approve the sole source purchase of one 3D HW LS Focus 70 Laser Scanner from FARO Technologies, Inc. for no more than \$44,548.23. Commissioner Dedeke seconded the motion and was unanimously approved. The Mayor declared the motion carried 5-0.

Consider Change Order to the 2017 WPC Landfill Contract with Hamm Quarry – Public Works Director Mike McDonald presented for consideration the approval of a change order in the amount of \$8,923.76 to the contract with Hamm Quarry for the 2017 landfill services for dewatered sludge.

Commissioner Bauder moved to approve the change order for the 2017 contract to Hamm’s Landfill for the disposal of dewatered sludge in the amount of \$8,923.76. Commissioner Dedeke seconded the motion and was unanimously approved. The Mayor declared the motion carried 5-0.

Consider Design Contract with TreanorHL for Phase 4 of the Riverfront Community Center (RFCC) Stone Replacement Project – Deputy Public Works Director Mike Hooper gave a brief history of the stone restoration to this point. Mr. Hooper then presented for consideration and approval the design contract with TreanorHL for Phase 4 of the Riverfront Community Center Stone Replacement Project in an amount not to exceed \$66,300.00. Julia Manglitz, project manager with TreanorHL gave a PowerPoint presentation on the history of the Community Center.

Commissioner Bauder moved to approve the design contract with TreanorHL for Phase 4 of the Riverfront Community Center Stone Replacement Project in an amount not to exceed \$66,300.00. Commissioner Dedeke seconded the motion and was unanimously approved. The Mayor declared the motion carried 5-0.

First Consideration Ordinances:

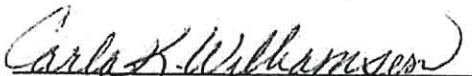
First Consideration Charter Ordinance related to Stormwater Program –City Clerk Carla Williamson presented for first consideration a charter ordinance exempting the city from K.S.A. 12-3101 et. seq. to create a Stormwater Management Program for the City of Leavenworth.


There was a consensus by the City Commission to place the charter ordinance on first consideration.

CONSENT AGENDA:

**POLICY REPORT
FIRST CONSIDERATION CHARTER ORDINANCE TO
CREATE A STORMWATER MANAGEMENT PROGRAM**

JANUARY 23, 2018


Carla K. Williamson, CMC City Clerk


Paul Kramer, City Manager

ISSUE:

Consider placing on first consideration a Charter Ordinance, exempting itself from K.S.A. 12-3101 *et seq.*, to create a Stormwater Management Program for the City of Leavenworth.

BACKGROUND:

The City Commission has discussed a proposed stormwater program at seven (7) Study Sessions (May 2, 2017, June 6, 2017, July 13, 2017, September 5, 2017, November 21, 2017, December 5, 2017 and January 16, 2018) and held two (2) Public Meetings (at Riverfront Community Center and Fire Station No. 1). At the January 16, 2018 there was a discussion and consensus by the City Commission to proceed with the adoption of a charter ordinance creating a Stormwater Program for the city.

K.S.A. 12-3101 *et seq.* provides for such a program however many cities have exempted out of this section of the state statute for a couple of reasons.

- The first reason is that the statute is non-uniform, meaning it does not apply the ordinance to all cities equally. K.S.A 12-3105 specifically states that a city of the first class may do something that other class cities cannot.
- The second reason is the inability of the Kansas Department of Health and Environment (KDHE) to issue resolutions as stated in K.S.A. 12-2103.

The adoption of the charter ordinance will not set any rates or determine how the program will be administered it just allow the city to charter out of the existing state statute in creating the program. All future details of the program will then be set by the City Commission by regular ordinance.

City Attorney Tom Dawson will go over the details of the Charter Ordinance.

ACTION:

Consensus to place on first consideration

ATTACHMENTS:

- K.S.A. 12-3101 *et seq.*
- Proposed Charter Ordinance

Kansas Statutes
Chapter 12 – Cities and Municipalities
Article 31. Water Pollution Act

12-3101. Name of act. This act shall be known as the water pollution act.

History: L. 1959, ch. 87, § 1; June 30.

12-3102. Definitions. For the purpose of this act, the following words and phrases shall have the meaning ascribed to them in this section:

(a) "Sewer" or "sewer system" shall mean sanitary and storm sewers, pumping stations, sewage treatment plants, main sewers, intercepting sewers, outfall sewers, surface drains and works for the collection, transportation, pumping, treating, and disposing of water carried wastes or storm or surface waters, and all appurtenances necessary in the maintenance and operation of the same.

(b) "Municipality" shall mean any city, county, township, township sewer district, or other political subdivision of the state authorized to levy taxes or empowered to cause taxes to be levied

12-3103. Adoption of resolution by municipality and secretary of health and environment; contents. No municipality shall exercise any of the powers hereafter conferred by this act until its local governing body and the secretary of health and environment shall have adopted a resolution finding that: (1) The sewer system of such municipality is inadequate to meet the standards of the secretary of health and environment; and (2) the construction, reconstruction, development, or redevelopment of a sewer system of such municipality is necessary in the interest of public health and welfare of the residents of the state.

12-3104. Sewer systems; powers of municipality. Every municipality shall have all the powers necessary or convenient to plan, alter, enlarge, extend, improve, construct, reconstruct, develop, redevelop, operate and maintain a sewer system of such municipality, including the following powers:

(a) To adopt by ordinance or resolution sewer service charges based on a per unit volume of water used and based on the strength and volume of sewage contributed;

(b) To use the proceeds of the sewer service charges to plan, alter, enlarge, extend, improve, construct, reconstruct, develop, redevelop, operate and maintain sewer systems;

(c) To issue revenue bonds and use the proceeds of said revenue bonds to plan, alter, enlarge, extend, improve, construct, reconstruct, develop and redevelop sewer systems;

(d) To use the proceeds of the sewer service charges to pay the principal and interest on revenue bonds for the planning, altering, enlarging, extending, improving, constructing, reconstructing, developing, redeveloping, operating and maintaining sewer systems;

(e) To contract with agencies of the federal government, public bodies of this state or other states, or with any private person or body for jointly planning, altering, enlarging, extending, improving, constructing, reconstructing, developing, redeveloping and maintaining sewer systems;

(f) To contract with agencies of the federal government, public bodies of this state or other states or with any private person or body for receiving and treating sewage from outside of the limits of the municipality;

(g) To plan, alter, enlarge, extend, improve, construct, reconstruct, develop, redevelop, operate and maintain a sewer or sewer system outside the boundaries of the municipality and to have the right of eminent domain outside of the limits of the municipality in order to acquire right of way for a sewer or sewer systems; and

(h) To borrow money and to apply for and accept advances, loans, grants, contributions or any other form of financial assistance from the federal government, the state, county or other public body for the purposes of this act.

A municipality may include in any contract for financial assistance with the federal government such conditions imposed pursuant to federal law as the municipality may deem reasonable and appropriate.

12-3105. Same; rules and regulations authorized; billing and collection of sewer service charges; discontinuance of water service, when. The governing body of a municipality shall have the power by ordinance or resolution to adopt rules and regulations providing for the management and operation of its sewer system, prohibiting the discharge of matter deleterious to the proper operation of the treatment plant into the sewer system,

establishing the types and characteristics of sewage that may be discharged into the sewer system, fixing the service charges, requiring security for the payment thereof, and providing methods and rules of collection, and providing for the disposition of the revenue therefrom. In the event any person, firm, corporation, political unit or organization living or operating on premises connected to a sanitary sewer shall neglect, fail or refuse to pay the service charges fixed by the governing body of said municipality, the governing body is hereby authorized to refuse the delivery of water through the pipes and mains of a publicly owned waterworks until such time as such charges are fully paid: Provided, however, That any city of the first class now owning or hereafter acquiring a municipal water plant and a municipal light plant, which plants are now or hereafter operated, managed and controlled by a board of public utilities, as provided by K.S.A. 13-1220 to 13-1234a, inclusive, and all acts and parts of acts amendatory thereof or supplemental thereto, may with the consent of the board of public utilities bill and collect the sewer service charges through the administrative departments of the board of public utilities and the board of public utilities may discontinue water services to premises owned, managed or occupied by consumers who have delinquent sewer service charges.

12-3106. Issuance of sewer system revenue bonds; requirements; election. (a) A municipality shall have power to issue revenue bonds from time to time in its discretion to finance the planning, altering, enlarging, extending, improving, developing, and redeveloping, construction and reconstruction of sewer systems under this act. Such bonds shall be made payable, as to both principal and interest, solely from the income, proceeds, revenues, and funds of the municipality derived from or held in connection with its sewer systems: Provided, however, That payment of such bonds, both as to principal and interest, may be further secured by a pledge of any loan, grant or contribution from the federal government.

(b) Bonds issued under this section shall not constitute an indebtedness within the meaning of any constitutional or statutory debt limitation or restriction, and shall not be subject to the provisions of any other law relating to the authorization, issuance or sale of bonds. Bonds issued under the provisions of this act are declared to be issued for an essential public and governmental purpose and, together with interest thereon and income therefrom, shall be exempted from all taxes.

(c) Bonds issued under this section shall be authorized by ordinance or resolution of the local governing body and may be issued in one or more series and shall bear such date or dates, be payable upon demand or mature at such time or times, bear interest at such rate or rates, not exceeding the maximum rate of interest prescribed by K.S.A. 10-1009, be in such denomination or denominations, be in such form, have such rank or priority, be executed in such manner, and be subject to such terms of redemption (with or without premium), be secured in such manner, and have such other characteristics as may be provided by such ordinance or resolution issued pursuant thereto: Provided, That no bonds shall be issued under this act until the same have been authorized by a majority of the vote of the electors of such municipality in the manner prescribed by K.S.A. 10-120 or any amendments thereto.

12-3107. Same; power to issue bonds supplemental and additional. The power herein granted to issue bonds shall be supplemental to and not amendatory of the provisions of all other laws, and shall be in addition to and independent of the authority granted to certain municipalities by K.S.A. 10-1201 to 10-1212, inclusive, 13-1238 to 13-1245, inclusive, and 13-1252 to 13-1264, inclusive, and acts amendatory thereof or supplemental thereto.

CHARTER ORDINANCE NO. _____

A CONSTITUTIONAL CHARTER ORDINANCE EXEMPTING THE CITY OF LEAVENWORTH, KANSAS FROM THE PROVISIONS OF THE KANSAS WATER POLLUTION ACT K.S.A 12-3101 ET SEQ AND PROVIDING FOR THE CREATION OF AN ORDINANCE ESTABLISHING A STORMWATER MANAGEMENT PROGRAM AND A STORMWATER UTILITY FEE FOR THE CITY OF LEAVENWORTH, KANSAS FOR THE PURPOSE OF PLANNING, DESIGNING, FUNDING, CONSTRUCTING AND MAINTAINING STORMWATER MANAGEMENT, SEDIMENT AND EROSION CONTROL, AND FLOOD AND STORMWATER DISCHARGE PROGRAMS, PROJECTS AND FACILITIES AND REVIEWING AND APPROVING STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLANS FOR LAND DISTURBING ACTIVITIES, AND PROVIDING FOR THE ADMINISTRATION AND ENFORCEMENT THEREOF AND PROVIDING FOR STORMWATER MANAGEMENT RATES TO BE SET BY RESOLUTION OF THE GOVERNING BODY.

WHEREAS the state of Kansas has passed legislation, known as the Kansas Water pollution act, K.S.A 12-3101 et seq. (KWPA) which has been found by the Kansas Supreme Court to be a non-uniform legislative act that affects different classes of cities in the State in different manners and

WHEREAS the KWPA also has a provision that allows the Secretary of Kansas Department of Health and Environment (KDHE) to by resolution allow cities to create their own storm water utility under the KWPA and

WHEREAS the Kansas Legislature has not created in the KPWA the authority for the KDHE to issue resolutions, and KDHE has taken the position that it does not have the authority to issue resolutions allowing cities to create a storm water utility under the KWPA: and

WHEREAS various cities have used their Constitutional Charter Ordinance authority to exempt themselves from the provision of the KWPA and KWPA is not uniform as it applies to all cities in the state which permits the exemption; and

WHEREAS the City of Leavenworth, Kansas seeks to create a storm water utility for the purpose of managing storm water in the City and to collect a fee for that and other applicable services and to manage, administer and enforce such regulations as promulgated by the City of Leavenworth for that purpose;

NOW, THEREFORE BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS THAT:

Section 1. Exemption from State law. The City of Leavenworth by virtue of the power vested in it by Article 12, Section 5 of the Constitution of the State of Kansas hereby exempts itself from the provisions of the KWPA, K.S.A 12-3101 *et seq.* for the purpose of creating a storm water utility and a fee to implement the same.

Section 2. Repeal of inconsistent provisions. Any provision of the current ordinances of the City that are inconsistent or in conflict with this Charter Ordinance are hereby repealed to the extent of such inconsistency or conflict; other all such provisions are hereby ratified and confirmed.

Section 3. This Charter Ordinance shall be published once a week for two (2) consecutive weeks in the official city newspaper.

Section 4. This Charter Ordinance shall take effect sixty-one (61) days after its final publication, unless a sufficient petition for a referendum is filed and a referendum held on this Charter Ordinance as provided in Article 12, Section 5, Subsection (c) (3) of the Constitution of the State of Kansas, in which case this Charter Ordinance shall become effective if approved by a majority of the electors voting thereon.

Passed and approved by the Governing Body, not less than two-thirds of the members elect voting in favor thereof, the 13th day of February 2018.

Mark Preisinger, Mayor

{SEAL}

ATTEST:

Carla K. Williamson CMC, City Clerk

Published: The Leavenworth Times

First Publication Date: August 11, 2017

Second Publication Date: August 18, 2017



CALL TO ORDER - The Governing Body met in regular session and the following commission members were present: Mayor Mark Preisinger, Mayor Pro-Tem Jermaine Wilson, Commissioners Nancy Bauder, Larry Dedeke and Myron J. (Mike) Griswold.

Others present: City Manager Paul Kramer, Assistant City Manager Taylour Tedder, Parks & Recreation Director Steve Grant, Parks Superintendent Brian Bailey, Public Works Director Mike McDonald, Deputy Public Works Director Mike Hooper, WPC Superintendent Chuck Staples, City Planner Julie Hurley, Finance Director Ruby Maline, Public Information Officer Melissa Bower, City Attorney Tom Dawson, Deputy City Clerk Cary Collins and City Clerk Carla K. Williamson.

Mayor Preisinger opened the meeting with the pledge of allegiance followed by silent meditation.

Presentation to Ron and Kay Beaman; Wheel Thing Skate Center – Mayor Preisinger presented on behalf of the City a letter and certificate thanking Ron and Kay Beaman for 32 years of operating the Wheel Thing Skate Center dedicated to the youth of Leavenworth and congratulating them on their retirement.

Proclamation:

Military America Saves Week of February 26 – March 3, 2018; Kathy Rizzo and Tina Farr were present to accept the proclamation.

OLD BUSINESS:

Consideration of Previous Meeting Minutes:

Commissioner Bauder moved to approve the minutes from the January 23, 2018 regular meeting and the January 24, 2018 and February 6, 2018 special meeting as presented. Commissioner Dedeke seconded the motion and was unanimously approved. The Mayor declared the motion carried 5-0.

Second Consideration Ordinances:

Second Consideration Charter Ordinance No. 58 Related to Creating a Stormwater Program – City Manager Paul Kramer stated that staff would like more time to review the ordinance before second consideration and recommended tabling the item until the next meeting.

The City Commission was in favor by consensus to table the item. No action was taken. Second Consideration will be presented at the February 27, 2018 regular meeting.

NEW BUSINESS:

Citizen Participation:

POLICY REPORT
SECOND CONSIDERATION
CHARTER ORDINANCE 58 TO CREATE A STORMWATER MANAGEMENT PROGRAM

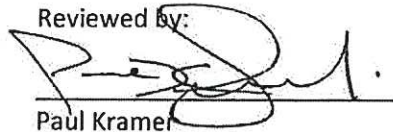
FEBRUARY 13, 2018

Prepared by:



Carla K. Williamson, CMC
City Clerk

Reviewed by:



Paul Kramer
City Manager

BACKGROUND:

At the January 23, 2108 meeting the City Commission discussed and placed on first consideration:

A CONSTITUTIONAL CHARTER ORDINANCE EXEMPTING THE CITY OF LEAVENWORTH, KANSAS FROM THE PROVISIONS OF THE KANSAS WATER POLLUTION ACT K.S.A 12-3101 ET SEQ AND PROVIDING FOR THE CREATION OF AN ORDINANCE ESTABLISHING A STORMWATER MANAGEMENT PROGRAM AND A STORMWATER UTILITY FEE FOR THE CITY OF LEAVENWORTH, KANSAS FOR THE PURPOSE OF PLANNING, DESIGNING, FUNDING, CONSTRUCTING AND MAINTAINING STORMWATER MANAGEMENT, SEDIMENT AND EROSION CONTROL, AND FLOOD AND STORMWATER DISCHARGE PROGRAMS, PROJECTS AND FACILITIES AND REVIEWING AND APPROVING STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLANS FOR LAND DISTURBING ACTIVITIES, AND PROVIDING FOR THE ADMINISTRATION AND ENFORCEMENT THEREOF AND PROVIDING FOR STORMWATER MANAGEMENT RATES TO BE SET BY RESOLUTION OF THE GOVERNING BODY.

ACTION:

Charter Ordinance No. 58 is now presented for second consideration and requires a roll call vote with four (4) affirmative votes.

CHARTER ORDINANCE NO. 58

A CONSTITUTIONAL CHARTER ORDINANCE EXEMPTING THE CITY OF LEAVENWORTH, KANSAS FROM THE PROVISIONS OF THE KANSAS WATER POLLUTION ACT K.S.A 12-3101 ET SEQ., SUCH THAT THE CITY MAY SUBSEQUENTLY PROVIDE FOR THE CREATION OF A STORM WATER MANAGEMENT PROGRAM AND A STORM WATER UTILITY FEE FOR THE CITY OF LEAVENWORTH, KANSAS, FOR THE PURPOSES OF PLANNING, DESIGNING, FUNDING, CONSTRUCTING AND MAINTAINING STORM WATER MANAGEMENT, SEDIMENT AND EROSION CONTROL, AND FLOOD AND STORMWATER DISCHARGE PROGRAMS, PROJECTS AND FACILITIES AND REVIEWING AND APPROVING STORM WATER MANAGEMENT AND SEDIMENT CONTROL PLANS FOR LAND DISTURBING ACTIVITIES, AND PROVIDING FOR THE ADMINISTRATION AND ENFORCEMENT THEREOF AND PROVIDING FOR STORM WATER MANAGEMENT RATES TO BE SET BY RESOLUTION OF THE GOVERNING BODY.

WHEREAS the state of Kansas has passed legislation, known as the Kansas water pollution act, K.S.A 12-3101 et seq. (KWPA) which has been found by the Kansas Supreme Court to be a non-uniform legislative act that affects different classes of cities in the State in different manners; and

WHEREAS the KWPA also has a provision that allows the Secretary of Kansas Department of Health and Environment (KDHE) to by resolution allow cities to create their own storm water utility under the KWPA; and

WHEREAS the Kansas Legislature has not created in the KWPA the authority for the KDHE to issue resolutions, and KDHE has taken the position that it does not have the authority to issue resolutions allowing cities to create a storm water utility under the KWPA; and

WHEREAS various cities have used their Constitutional Charter Ordinance authority to exempt themselves from the provision of the KWPA and KWPA is not uniform as it applies to all cities in the state which permits the exemption; and

WHEREAS upon exemption, the City of Leavenworth, Kansas would seek to create a storm water management program and establish a storm water utility fee for the purpose of managing storm water in the City and other applicable services and to manage, administer and enforce such regulations as may be promulgated by the City of Leavenworth for that purpose.

NOW, THEREFORE BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS THAT:

Section 1. Exemption from State law. The City of Leavenworth, by virtue of the power vested in it by Article 12, Section 5 of the Constitution of the State of Kansas, hereby exempts itself from the provisions of the KWPA, K.S.A 12-3101 *et seq.*

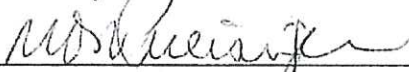
Section 2. Repeal of inconsistent provisions. Any provision of the current ordinances of the City that are inconsistent or in conflict with this Charter Ordinance are hereby repealed to the extent of such inconsistency or conflict; all such other provisions are hereby ratified and confirmed.

Section 3. This Charter Ordinance shall be published once a week for two (2) consecutive weeks in the official city newspaper.

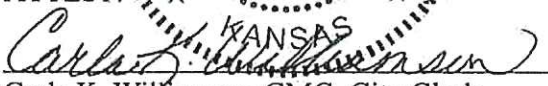
Section 4. This Charter Ordinance shall take effect sixty-one (61) days after its final publication, unless a sufficient petition for a referendum is filed and a referendum held on this Charter Ordinance as provided in Article 12, Section 5, Subsection (c) (3) of the Constitution of the State of Kansas, in which case this Charter Ordinance shall become effective if approved by a majority of the electors voting thereon.

Passed and approved by the Governing Body, not less than two-thirds of the members elect voting in favor thereof, this 27th day of February 2018.





Mark Preisinger, Mayor

ATTEST: 
Carla K. Williamson CMC, City Clerk

Published: The Leavenworth Times

First Publication Date: March 2, 2018

Second Publication Date: March 9, 2018

AFFP

Charter Ordinance No. 58 Effec

Affidavit of Publication

STATE OF KANSAS }
COUNTY OF } SS
LEAVENWORTH }

Tammy Lawson, being duly sworn, says:

That she is Tammy Lawson of the Leavenworth Times, a daily newspaper of general circulation, printed and published in Leavenworth, Leavenworth County, Kansas; that the publication, a copy of which is attached hereto, was published in the said newspaper on the following dates:

March 02, 2018, March 09, 2018

That said newspaper was regularly issued and circulated those dates.

SIGNED:

Tammy Lawson
Tammy Lawson

Subscribed to and sworn to me this 9 day of Mar, 2018

Rebecca A. Broom
Rebecca A. Broom, , Leavenworth County, Kansas

My commission expires: June 07, 2019

00000105 00029572

Deputy City Clerk
City of Leavenworth - Legals
100 North 5th Street
Leavenworth, KS 66048

Charter Ordinance No. 58 Effective Date: May 9, 2018

CHARTER ORDINANCE NO. 58

A CONSTITUTIONAL CHARTER ORDINANCE EXEMPTING THE CITY OF LEAVENWORTH, KANSAS FROM THE PROVISIONS OF THE KANSAS WATER POLLUTION ACT K.S.A 12-3101 ET SEQ.. SUCH THAT THE CITY MAY SUBSEQUENTLY PROVIDE FOR THE CREATION OF A STORM WATER MANAGEMENT PROGRAM AND A STORM WATER UTILITY FEE FOR THE CITY OF LEAVENWORTH, KANSAS, FOR THE PURPOSES OF PLANNING, DESIGNING, FUNDING, CONSTRUCTING AND MAINTAINING STORM WATER MANAGEMENT, SEDIMENT AND EROSION CONTROL, AND FLOOD AND STORMWATER DISCHARGE PROGRAMS, PROJECTS AND FACILITIES AND REVIEWING AND APPROVING STORM WATER MANAGEMENT AND SEDIMENT CONTROL PLANS FOR LAND DISTURBING ACTIVITIES, AND PROVIDING FOR THE ADMINISTRATION AND ENFORCEMENT THEREOF AND PROVIDING FOR STORM WATER MANAGEMENT RATES TO BE SET BY RESOLUTION OF THE GOVERNING BODY. WHEREAS the state of Kansas has passed legislation, known as the Kansas water pollution act, K.S.A 12-3101 et seq. (KWPA) which has been found by the Kansas Supreme Court to be a non-uniform legislative act that affects different classes of cities in the State in different manners; and WHEREAS the KWPA also has a provision that allows the Secretary of Kansas Department of Health and Environment (KDHE) to by resolution allow cities to create their own storm water utility under the KWPA; and WHEREAS the Kansas Legislature has not created in the KWPA the authority for the KDHE to issue resolutions, and KDHE has taken the position that it does not have the authority to issue resolutions allowing cities to create a storm water utility under the KWPA; and WHEREAS various cities have used their Constitutional Charter Ordinance authority to exempt themselves from the provision of the KWPA and KWPA is not uniform as it applies to all cities in the state which permits the exemption; and WHEREAS upon exemption, the City of Leavenworth, Kansas would seek to create a storm water management program and establish a storm water utility fee for the purpose of managing storm water in the City and other applicable services and to manage, administer and enforce such regulations as may be promulgated by the City of Leavenworth for that purpose. NOW, THEREFORE BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS THAT: Section 1. Exemption from State law. The City of Leavenworth, by virtue of the power vested in it by Article 12, Section 5 of the Constitution of the State of Kansas, hereby exempts itself from the provisions of the KWPA, K.S.A 12-3101 et seq. Section 2. Repeal of inconsistent provisions. Any provision of the current ordinances of the City that are inconsistent or in conflict with this Charter Ordinance are hereby repealed to the extent of such inconsistency or conflict; all such other provisions are hereby ratified and confirmed. Section 3. This Charter Ordinance shall be published once a week for two (2) consecutive weeks in the official city newspaper. Section 4. This Charter Ordinance shall take effect sixty-one (61) days after its final publication, unless a sufficient petition for a referendum is filed and a referendum held on this Charter Ordinance as provided in Article 12, Section 5, Subsection (c) (3) of the Constitution of the State of Kansas, in which case this Charter Ordinance shall become effective if approved by a majority of the electors voting thereon. Passed and approved by the Governing Body, not less than two-thirds of the members elect voting in favor thereof, the 27th day of February 2018. Mark Preisinger, Mayor {SEAL} ATTEST: Carla K. Williamson CMC, City Clerk
Published: The Leavenworth Times
First Publication Date: March 2, 2018
Second Publication Date: March 9, 2018

REBECCA A. BROOM
Notary Public - State of Kansas
My Appt. Expires 6/7/19



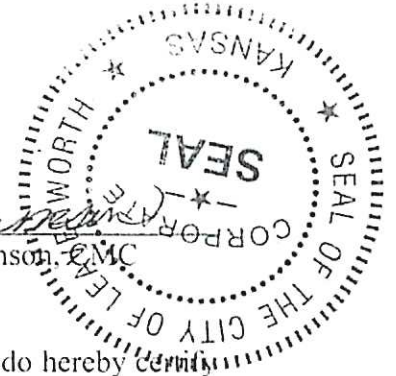
CERTIFICATE CHARTER ORDINANCE NO. 58

City of Leavenworth
County of Leavenworth
State of Kansas

I, Carla K. Williamson, City Clerk of the City of Leavenworth, County of Leavenworth, State of Kansas, do hereby certify that the attached and foregoing is full, true and correct copy of Charter Ordinance No. 58 of the said City of Leavenworth, Kansas, and that all acts and things required by Article 12, Section 5, of the Constitution of the State of Kansas were done and performed in the manner and within the time prescribed and that said ordinance became effective on the 9th day of May 2018.

Witness my hand and seal of the City this 9th day of May 2018.

Carla K. Williamson
City Clerk Carla K. Williamson



I, Carla K. Williamson, City Clerk of the City of Leavenworth, Kansas, do hereby certify that the above certificate was sent to the Secretary of State on the 9th day of May 2018.

Carla K. Williamson
City Clerk Carla K. Williamson



POLICY REPORT PWD NO. 18-15

ADOPT RESOLUTION B-2190 APPROVING THE CITY
STORMWATER MANAGEMENT PROGRAM

February 27, 2018

Prepared by:



Michael G. McDonald, PE
Director of Public Works

Reviewed by:



Paul Kramer,
City Manager

ISSUE:

Consider adoption of Resolution B-2190 approving the Stormwater Management Program.

BACKGROUND:

The City of Leavenworth is required by Kansas Department of Health and Environment (KDHE) and Environmental Protection Agency (EPA) to have a Stormwater Management Program (SMP) to address various programs to ensure national water quality. The City adopted the current Stormwater Management Program in 2016 and there were no changes in 2017.

The SMP was reviewed at the study session on February 20th, 2018.

The current SMP is required to be included in the KDHE Annual Report and submitted by February 28th via digital delivery. It is anticipated that the Annual Report (and therefore the Stormwater Management Program) will be submitted to KDHE on Wednesday, February 28th after final review by the City Commission at the February 27th meeting.

RECOMMENDATION:

Staff recommends the City Commission adopt Resolution B-2190 approving the Stormwater Management Program.

ATTACHMENT:

Resolution B-2190 Approving the City Stormwater Management Program

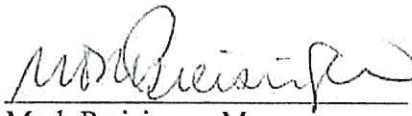
RESOLUTION NO. B-2190

BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS, AS FOLLOWS:

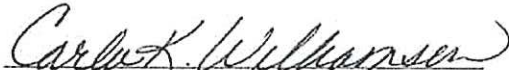
SECTION 1: The 2017 Stormwater Management Program shall become the official guiding authority for actions by the Leavenworth City Commission and its staff until or unless changed by official action.

PASSED AND APPROVED This 27th Day of February, 2018.




Mark Preisinger, Mayor

ATTEST:


Carla K. Williamson, CMC, City Clerk

(Summary Publish in the Leavenworth Times on June 15, 2018)

ORDINANCE NO. 8077

**AN ORDINANCE OF THE CITY OF LEAVENWORTH, KANSAS,
ESTABLISHING A NEW CHAPTER 103 OF THE LEAVENWORTH
CODE OF ORDINANCES, RELATING TO STORMWATER UTILITY.**

WHEREAS, on February 13, 2018, the Governing Body approved Charter Ordinance No. 58, which became finally effective as of May 9, 2018, exempting the City from the provisions of the Kansas Water Pollution Act, K.S.A. 12-3101 *et seq.*, such that the City may have subsequently provided for the creation of a stormwater management program and a stormwater utility fee for the City of Leavenworth;

WHEREAS, the Governing Body wishes to create a stormwater utility for the City of Leavenworth, Kansas; and

WHEREAS, the Governing Body has determined that a new Chapter 103 should be established in the Leavenworth Code of Ordinances for such stormwater utility, management program, and fee.

NOW THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS:

Section 1. That a new Chapter 103 of the Leavenworth Code of Ordinances is hereby established to read as follows:

Chapter 103

STORMWATER MANAGEMENT

Article I. Stormwater Management Utility

Sec. 103-1. Definitions. In addition to the words, terms and phrases elsewhere defined in this Article, the following words, terms and phrases, as used in this Article, but only for the purposes of this Article, shall have the following meanings:

- (a) *Bonds* means revenue or general obligation bonds or notes heretofore or hereafter issued to finance the costs of stormwater management.
- (b) *Building Permit* means a permit issued by the Building Inspector/Code Administrator which permits construction on a structure.
- (c) *City* means the City of Leavenworth, Kansas.
- (d) *City Commission* means the governing body of the City.

- (e) *Costs of Capital Improvement* means costs incurred in providing capital improvements to the stormwater management system or any portion thereof including, without limitation, alteration, enlargement, extension, improvement, construction, reconstruction, and development of the stormwater management system; professional services and studies connected thereto; principal and interest on bonds heretofore or hereafter issued, including payment of delinquencies of principal and interest due on bonds that are otherwise payable from special assessments; studies related to the operation of the system; costs of the stormwater management service fee study, performed to establish stormwater management service fees for the stormwater utility and to determine other start-up costs of the stormwater utility; costs related to the National Pollutant Discharge Elimination System Permit study, application, negotiation and implementation, as mandated by federal and state laws and regulations; acquisition of real and personal property by purchase, lease, donation, condemnation or otherwise, for the stormwater management system or for its protection; and costs associated with purchasing equipment, computers, furniture, etc., necessary for the operation of the system or the utility.
- (f) *Debt Service* means an amount equal to the sum of (i) all interest payable on bonds during a fiscal year, and (ii) any principal installments payable on the bonds during such fiscal year.
- (g) *Developed Property* means real property, other than undisturbed property, vacant property, or exempt property.
- (h) *Director* means the person appointed by the City Manager to be the Director of the City's Public Works Department or the Director's designee.
- (i) *Effective Date* means the date this ordinance is published in the official City newspaper and, pursuant hereto, takes effect.
- (j) *Exempt Property* means public right-of-way, public trails, public streets, public alleys, public sidewalks, and public lands and/or easements upon which the public stormwater management system is constructed and/or located.
- (k) *Fiscal Year* means a twelve (12)-month period commencing on the first day of January of any year.
- (l) *Multifamily Dwelling Unit* means an individual residential dwelling unit (whether an apartment, loft, condominium, duplex unit, or otherwise) which unit itself is not a single family residential property, but which unit may be located on or as part of single family residential property or nonresidential developed property. A multifamily dwelling unit may include, but need not be limited to, a Dwelling in Mixed-Use Structure, an

Attached Dwelling, an Elderly or Retirement Home Dwelling, a Live/Work Dwelling, a Multi-Family Dwelling, a Townhouse Dwelling, a Two-Family Dwelling, an Apartment, as such terms are defined or described in the City's Development Regulations, as adopted and amended from time to time.

- (m) *Nonresidential Developed Property* means developed property other than single family residential property or a multifamily dwelling unit (both as classified by the City), and includes commercial property and industrial property.
- (m) *Operating Budget* means the annual stormwater utility operating budget adopted by the City for the succeeding fiscal year.
- (o) *Operations and Maintenance* means, without limitation, the current expenses, paid or secured, for operation, maintenance and repair and minor replacement of the system, as calculated in accordance with generally accepted accounting practices, and includes, without limiting the generality of the foregoing, insurance premiums, administrative expenses including professional services, equipment costs, labor costs, and the cost of materials and supplies used for current operations.
- (p) *Public Stormwater Management System* means all elements of the stormwater management system that have been officially dedicated to and accepted by the City.
- (q) *Single Family Residential Property* means developed property used for single family detached dwelling units. For purposes of this Article, if multiple single family detached dwelling units (including but not limited to mobile homes) are located on one parcel of single family residential property, then each such unit shall be treated as a separate single family residential property.
- (r) *Revenues* means all rates, fees, assessments, rentals, charges or other income received by the stormwater utility in connection with the management and operation of the stormwater management system, including amounts received from the investment or deposit of monies in any fund or account, as calculated in accordance with generally accepted accounting practices.
- (s) *Stormwater Management Service Fee* means a fee authorized by this Article, as set forth in a resolution or an ordinance adopted or amended by the City Commission, established to pay operation and maintenance, costs of capital improvements, debt service associated with the stormwater management system, and other costs included in the operating budget.
- (t) *Stormwater Rate* means a rate or fee structure for the stormwater management service fee, established by City Commission resolution or

ordinance, charged for each property within the City that established by this Article or by a City Commission resolution or ordinance to be subject to such stormwater rate. The stormwater rate may be established on a residential property, multifamily, nonresidential property, commercial, industrial, square footage, or other basis as the City Commission may determine.

- (u) *Stormwater Management System, Sewer System, or System* means storm sewers that exist on the Effective Date or that are hereafter established, and all appurtenances necessary in maintaining and operating the same, including, but not limited to the following, to the extent owned or controlled by the City: pumping stations; enclosed storm sewers; outfall sewers; surface drains; street, curb and alley improvements associated with storm or surface water improvements; arches; pipes; natural and manmade wetlands; channels; ditches and culverts; rivers, streams, and creeks; wet and dry bottom basins; and other flood control facilities and works for the collection, transportation, conveyance, pumping, treatment, control, management, and disposal of storm or surface water or pollutants originating from or carried by storm or surface water.
- (v) *Stormwater Utility or Utility* means the utility created by this Article to operate, maintain and improve the stormwater management system and for all other purposes, as set forth in this Article.
- (w) *Undisturbed Property or Vacant Property* means real property that has not been altered from its natural condition in a manner such that the entrance of water into the soil matrix is prevented or retarded, or real property that is not single family residential property or nonresidential developed property, a multifamily dwelling unit, or exempt property.

Sec. 103-2. Creation of a Stormwater Utility; Findings and Determinations.

(a) Pursuant to the provisions of K.S.A. 12-3101, *et seq.*, as chartered out of by the City pursuant to Charter Ordinance No. 58, the City's general home rule authority, nuisance abatement authority, police powers and all other authority, the Leavenworth City Commission does establish a stormwater utility and declares its intention to operate, construct, maintain, repair and replace the public stormwater management system and operate the stormwater utility.

(b) The City Commission finds, determines, and declares that the elements of the stormwater management system providing for the collection, conveyance, detention, retention, treatment and release of stormwater benefit and provide services to real property within the incorporated City limits. The benefits of the stormwater management system include, but are not limited to, the provision of adequate systems of collection, conveyance, detention, retention, treatment and release of stormwater; the reduction of hazards to property and life

resulting from stormwater runoff; improvement in general health and welfare through reduction of undesirable stormwater conditions; improvement of water quality in the storm and surface water system and their receiving waters; and appropriate balancing between development and preservation of the natural environment.

Sec. 103-3. Administration. The stormwater utility, under the supervision of the Director, shall have the power to:

- (a) administer the acquisition, design, construction, maintenance, operation, extension and replacement of the stormwater management system, including any real and personal property that is, will become a part of, or will protect the system;
- (b) administer and enforce this Article and all regulations, guidelines and procedures relating to the design, construction, maintenance, operation and alteration of the stormwater management system, including but not limited to, the flow rate, volume, quality and/or velocity of the stormwater conveyed thereby;
- (c) advise the City Commission on matters relating to the stormwater management system;
- (d) review plans concerning the creation, design, construction, extension and replacement of the stormwater management system and make recommendations to the City Commission;
- (e) make recommendations to the City Commission concerning the adoption of ordinances, resolutions, guidelines and regulations in furtherance of this Article and/or to protect and maintain water quality within the stormwater management system, in compliance with water quality standards established by state, county, regional and/or federal agencies, as now adopted or hereafter adopted or amended;
- (f) analyze the cost of services and benefits provided by the stormwater management system and the structure of fees, service charges, fines and other revenues of the stormwater utility at least once each year;
- (g) make recommendations to the City Commission concerning the cost of service and benefits provided by the stormwater management system and the structure of fees, service charges, fines and other revenues of the stormwater utility; and
- (h) administer programs established pursuant to this Article or pursuant to ordinances, resolutions, regulations or guidelines hereafter adopted by the City Commission that provide for credits and/or incentives which reduce stormwater management service fees imposed against properties.

Sec. 103-4. Operating Budget.

The City shall, as part of its annual budget process, adopt an operating budget for the stormwater utility for the next following fiscal year. The operating budget shall conform with State Budget Law, city policy and generally accepted accounting practices. The initial operating budget commences January 1, 2019, and ends December 31, 2019.

Sec. 103-5. Stormwater Management Service Fee.

- (a) *Service Fee Established.* Subject to the provisions of this Article, there is imposed on each and every single family residential property, nonresidential developed property, and multifamily dwelling unit, a stormwater management service fee. This stormwater management service fee shall be determined and set by the provisions of this Article in accordance with the stormwater rate. The amount of the fee shall be set out in Appendix F.
- (b) *Statement of Stormwater Rate.* The stormwater rate that is used to determine the stormwater management service fee for each single family residential property, nonresidential developed property, and multifamily dwelling unit shall be as established by ordinance or resolution heretofore adopted or hereafter adopted by the City Commission, and as thereafter amended by ordinance of the City Commission.
- (c) *Stormwater Management Service Fee for Single Family Residential Property.* The stormwater management service fee for single family residential property shall be determined by reference to the stormwater rate, as established by a City Commission resolution or ordinance. The Director shall update the database for residential developed properties on an annual basis. In the event of newly-constructed residential property, the charge for the stormwater management service fee attributable to that new single family residential property shall commence as of the first day of the calendar year after the date the building permit has been issued for that new single family residential property, regardless of whether a certificate of occupancy has been issued.
- (d) *Stormwater Management Service Fee for Nonresidential Developed Property.* The stormwater management service fee for nonresidential developed property shall be determined by reference to the stormwater rate, as established by a City Commission resolution or ordinance. The Director shall update the database for nonresidential developed properties on an annual basis. In the event of newly-constructed nonresidential property, the charge for the stormwater management service fee attributable to that new nonresidential developed property shall commence as of the first day of the calendar year after the date the building permit

has been issued for that new nonresidential developed property, regardless of whether a certificate of occupancy has been issued.

- (e) *Stormwater Management Service Fee for Multifamily Dwelling Units.* The stormwater management service fee for multifamily dwelling units shall be determined by reference to the stormwater rate, as established by a City Commission resolution or ordinance. The Director shall update the database for multifamily dwelling units on an annual basis. In the event of newly-constructed multifamily dwelling units, the charge for the stormwater management service fee attributable to those new multifamily dwelling units shall commence as of the first day of the calendar year after the date the building permit has been issued for those new multifamily dwelling units, regardless of whether a certificate of occupancy has been issued.

Notwithstanding the foregoing, the stormwater management fee shall not be imposed as any individual multifamily dwelling unit if, pursuant to the provisions of Section 103-6 below, the owner of such unit can establish that such multifamily dwelling unit has not been leased or occupied within the twelve (12) calendar months immediately preceding the date by which an appeal must be filed under Section 103-6.

- (f) *Stormwater Management Service Fee Calculation.* The Director shall initially, and from time to time, and with reference to the stormwater rate, determine the stormwater management service fee applicable to single family residential properties, nonresidential developed properties, and multifamily dwelling units within the City. To the extent the stormwater rate is established on a square footage basis (whether as to lot size, buildings, or both), the City shall have such square footage calculated to establish the stormwater management service fee. The Director shall make the initial calculations with respect to existing single family residential properties, nonresidential developed properties, and multifamily dwelling units and may from time to time change this calculation from the information and data deemed pertinent by the Director. With respect to property proposed to be nonresidential developed property, the applicant for development or redevelopment approval shall submit square footage calculations as to lot size and building/improvements size, in accordance with the City's building/plan submission requirements, as established from time to time.

Sec. 103-6. Appeal Procedure.

- (a) Owners of single family residential property, nonresidential developed property, or a multifamily dwelling unit with respect to which a stormwater management service fee has been imposed, who:

- (1) disagree with the manner by which the applicable stormwater management service fee was determined or calculated; or
- (2) who believe the stormwater management service fee should not be applied to such owner's multifamily dwelling unit on account of non-leasing or non-occupancy, as provided in Section 103-5(e) above;

may appeal the calculation or finding to the City. The owner/appellant must file a written notice of appeal with the City Clerk by no later than December 1 of the calendar year for which the stormwater management service fee is applicable. The appealing party shall provide information concerning the basis of the appeal, and any other information that the Director shall request to the appellant. The City Clerk will set an appeal date within seven (7) days after the date the timely and fully-completed appeal notice is filed with the City. The City Manager or his/her designee will provide a decision in writing on the appeal with seven (7) days after the scheduled appeal date.

- (b) In all instances, the burden of proof shall be on the appellant to demonstrate, by clear and convincing evidence, that the determination of the Director, from which the appeal is being taken, is erroneous.
- (c) The filing of a notice of appeal shall not stay the imposition, calculation or duty to pay the fee. The appellant shall pay the stormwater management service fee, as stated in the billing, to the Leavenworth County, Kansas, Treasurer. If the City determines that the appellant should not pay a fee, or should pay a fee amount less than the amount appealed from, the City shall issue a check to the appellant in the appropriate amount within ten (10) business days after the date of the applicable written decision, which in no event shall be more than the amount of the fee paid by the appellant as of the date the check is issued.
- (d) The decision of the City Manager or his/her designee shall be final.

Sec. 103-7. Stormwater Management Service Fee Collection.

- (a) The stormwater management service fee shall be billed by the Leavenworth County, Kansas, Clerk and collected by the Leavenworth County, Kansas, Treasurer. The stormwater management service fee shall be shown as a separate item on the County's annual ad valorem property tax statement, in accordance with the procedures established in an agreement, pursuant to K.S.A. 12-2908, between the City and the County, as hereby authorized. The payment of stormwater management service fee bills for any given property shall be the responsibility of the owner of the property that is provided service by the stormwater system.

- (b) Stormwater management fees shall be subject to interest and penalties for late payment, which interest and penalties shall be the same as that imposed for late payment of ad valorem property taxes collected by the County, and, as and to the extent permitted by applicable law, shall be assessed, shall constitute a lien and be collected by the County in the same manner as late charges are assessed and collected by the County for ad valorem property taxes, regardless of whether the stormwater management service fees were incurred when a property owner was in possession of the property or a non-owner was in possession of the property.

Sec. 103-8. Stormwater Utility.

Stormwater management service fees collected by the City shall be paid into a fund that is hereby created and shall be known as the "Stormwater Utility Fund." This revenue shall be used for the purpose of paying costs of capital improvements, administration of the stormwater utility, operation, maintenance and debt service of the stormwater management system, and to carry out all other lawful purposes of the utility. In addition, fund transfers from this fund to the Bond and Interest Fund may be made to pay debt service on bonds issued by the City to fund the City's stormwater management activities.

Sec. 103-9. Issuance of Sewer Revenue Bonds; Requirements.

- (a) Having chartered out of, and exempting the City from, the provisions of the Kansas Water Pollution Act, K.S.A. 12-3101, pursuant to Charter Ordinance No. 58, the City Commission shall have the power to use any unencumbered municipal revenues and/or to issue revenue bonds from time to time in its discretion, without an election, to finance the planning, altering, enlarging, extending, improving, constructing, and reconstructing the Stormwater Management System. Such bonds shall be made payable, as to both principal and interest, solely from the income, proceeds, revenues, and funds of the City derived from or held in connection with its Sewer System or Sewer Systems; provided, however, that payment of these bonds, both as to principal and interest, may be further secured by a pledge of other unencumbered municipal revenues and/or of any loan, grant, or contribution from the federal government, the State of Kansas, other states, counties, cities, drainage districts, public bodies of the state, or any person.
- (b) Bonds issued under this section shall not constitute an indebtedness within the meaning of any constitutional or statutory debt limitation or restriction, and shall not be subject to the provisions of any other law relating to the authorization, issuance, or sale of bonds. Bonds issued under the provisions of this section are declared to be issued for an essential public purpose and governmental purpose and, together with interest thereon and income therefrom, shall be exempted from all taxes as and in accord with the law of any applicable taxing jurisdiction.

- (c) Bonds issued under this section shall be authorized by ordinance or resolution of the City Commission and may be issued in one or more series and shall bear such date or dates, be payable on demand or mature at such time or times, bear interest at such rate or rates, not exceeding the maximum rate of interest prescribed by law (including K.S.A. 10-1009), be in such form, have such rank or priority, be executed in such manner, and have such other characteristics as may be provided by such ordinance or resolution.
- (d) Pending the issuance of revenue bonds authorized by this section, the City Commission may issue revenue anticipation bonds of the City for the purpose of providing interim financing for a project, such revenue anticipation bonds being payable from revenue bonds issued to provide permanent financing for activities authorized by this Article and the income, proceeds, revenues, and funds of the City derived from or held in connection with its Sewer System.

Sec. 103-10. Severability.

In the event that any portion or section of this Article is determined to be invalid, illegal or unconstitutional by a court of competent jurisdiction, the decision shall in no manner affect the remaining portions or sections of this Article, which shall remain in full force and effect.

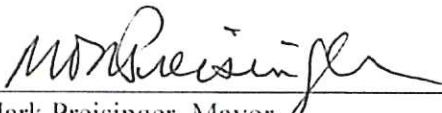
Section 2. This Ordinance shall take effect and be in force from and after its passage, approval, and publication in the official city newspaper.

PASSED and APPROVED by the Governing Body on the 12th day of June, 2018.



ATTEST:


Carla K. Williamson CMC, City Clerk

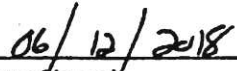

Mark Preisinger, Mayor

Ordinance No. 8077 Summary

On June 12, 2018 the City of Leavenworth, Kansas adopted Ordinance No. 8077 an Ordinance of the City of Leavenworth, Kansas establishing a new Chapter 103 of the Leavenworth Code of Ordinances, relating to Stormwater Utility. A complete copy of this ordinance is available at www.lvks.org or at the Office of the City Clerk 100 N 5th Street Leavenworth Kansas. This summary certified by David E. Waters, City Attorney Publish Leavenworth Times June 15, 2018.



David E. Waters, City Attorney



Date Signed

AFFP .

Ordinance No. 8077 Summary On J

Affidavit of Publication

STATE OF KANSAS }
COUNTY OF } SS
LEAVENWORTH }

Ordinance No. 8077 Summary
On June 12, 2018 the City of Leavenworth, Kansas adopted Ordinance No. 8077 an Ordinance of the City of Leavenworth, Kansas establishing a new Chapter 103 of the Leavenworth Code of Ordinances, relating to Stormwater Utility. A complete copy of this ordinance is available at www.lvks.org or at the Office of the City Clerk 100 N 5th Street Leavenworth Kansas. This summary certified by David E. Waters, City Attorney
Published in the Leavenworth Times June 15, 2018.

Barbara Daniels, being duly sworn, says:

That she is Barbara Daniels of the Leavenworth Times, a daily newspaper of general circulation, printed and published in Leavenworth, Leavenworth County, Kansas; that the publication, a copy of which is attached hereto, was published in the said newspaper on the following dates:

June 15, 2018

That said newspaper was regularly issued and circulated those dates.

SIGNED:

Barbara Daniels

Barbara Daniels

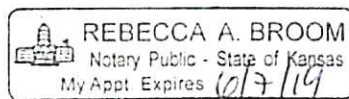
Subscribed to and sworn to me this 15 day of June, 18

Rebecca A. Broom
Rebecca A Broom, , Leavenworth County, Kansas

My commission expires: June 07, 2019

00000105 00030860

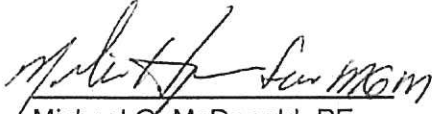
Deputy City Clerk
City of Leavenworth - Legals
100 North 5th Street
Leavenworth, KS 66048



POLICY REPORT PWD NO. 18-51
2018 STORMWATER MANAGEMENT PLAN REVIEW

December 4, 2018

Prepared by:



Michael G. McDonald, PE
Director of Public Works

Reviewed by:



Paul Kramer
City Manager

ISSUE:

Review the 2019 action items and plans for the stormwater management program

BACKGROUND:

In discussions related to the implementation of the stormwater management program, the consensus was to begin making improvements as soon as possible, while working on engineering plans, a system assessment project and other large repairs/replacements that are more complex and require a more extended timeframe.

The initial funds from the stormwater service fee will be available in early 2019, and staff has worked toward a plan that will begin to put those resources to use as soon as possible. This policy report follows the outline of the programs described in previous Commission meetings.

Initial areas of focus will be:

1. Orange fence repairs
 - a. Less difficult projects, plans prepared internally
 - b. More difficult projects, some requiring an engineering contract
2. A system assessment that will lead to development of the other programs previously identified (i.e. curb inlet, corrugated metal pipe, stone/brick arch, stream bank/erosion)
3. Ensure that project signage reflects the stormwater service fee as the funding source

City Staff has targeted approximately 30 "orange fence" locations that currently have some type of temporary fencing around them, and/or are known and are impacting adjacent properties.

Each location was evaluated based on the criteria below, with the information entered into a spreadsheet and notebook to allow for basic sorting to assist in determining a course of action.

1. Reviewed the accumulated information – typically a combination of pictures, CCTV inspection reports, work order information and staff knowledge.
2. Evaluated the expected repair for requiring outside engineering and formal drawings taking into account project type, depth, known utility conflicts, need for easements and other documentation.

3. Evaluated the expected repair for ease of construction from 1=easiest, 2=moderate, 3=difficult.

This information was placed on a map using colored dots to identify key features noted above. There is generally some economy of scale from bidders as well as inspection and management costs if projects can be grouped by similarity and/or location. A study of the map and features identified three initial project groups that met the following criteria:

- Between five and eight locations with similar projects grouped geographically
- A typical project requiring no engineering, only staff work and review
- Relative ease of construction

Five locations, mostly north of Spruce (green dots shown below), have been identified for the first bid package to be issued in early 2019. There is another group of six projects meeting these criteria south of Spruce Street that will be grouped together for a second project, also in early 2019. A third project will address any additional sites, as well as the yellow dots and possibly some red dots that will require limited engineering work.



Location	Description	Estimated Cost
810 Cherokee	Replace existing with 24" pipe	\$15,000
1200 Cherokee	Replace existing with 15" pipe & inlets	\$18,000
330 N. 20 th Terrace	Reset 18" pipe, install flume	\$7,500
509 S. 17 th Street	Repair Street, replace rip-rap	\$10,000
1013 S. 17 th Terrace	Replace pipe, possible other repairs	\$12,000

It is important to note that a project at 3118 Iowa was on the original list, but had greatly deteriorated to the extent it was a danger to the home and occupants. City staff used an accelerated process to select a contractor for the repair. The work is scheduled to begin as soon as the weather permits, taking less than two weeks to complete. The 3118 Iowa project is the first project of the new stormwater program.

Goals for 2019

1. Package, bid and complete north of Spruce "Orange Fence" projects
2. Package, bid and complete south of Spruce "Orange Fence" projects
3. Identify projects for late 2019 and early 2020 construction from the "Orange Fence" effort, expected to be primarily the yellow dots and possibly some red dots.
4. Select engineer(s) to design complex projects, generally the red and red-star dots.
5. Develop a scope of work and select a firm for the system assessment effort
6. Determine the most efficient method to construct and engineer batches of projects, including exploring the idea of an indefinite quantity contract for a period of time.
7. Create and populate a dedicated web page for project information for all stormwater fee-funded projects.

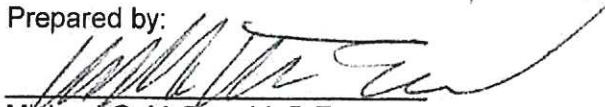
ATTACHMENTS:

- Policy Report PWD 17-40 without attachments


**POLICY REPORT PWD NO. 18-11
REVIEW STORMWATER MANAGEMENT PROGRAM**

February 20, 2018

Prepared by:


Michael G. McDonald, P.E.,
Director of Public Works

Submitted by:


Paul Kramer,
City Manager

ISSUE:

Review Stormwater Management Program

BACKGROUND:

The City of Leavenworth is a Phase II City for stormwater matters and is regulated by KDHE. The current Stormwater Management Program (SMP) was adopted by the City Commission on February 23, 2016 is attached to this report. The report outlines how the City intends to implement programs to protect water quality in the creeks and streams within the City; ultimately contributing to improved water quality of the Missouri and Mississippi Rivers.

The goals of the program are to:

- Protect people and property from water quantity issues (flooding).
- Protect and improve water quality in the creeks and streams of Leavenworth.

The EPA and KDHE dictate the form of the SMP, particularly how the "Six Minimum Control Measures" should be addressed by the City (attached). These six measures are:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff and Control
5. Post-Construction Stormwater Management in New Development and Redevelopment Projects
6. Pollution Prevention/Good Housekeeping for Municipal Operations

These control measures are addressed by "Best Management Practices" (BMP). This is a broad term that generally relates to an expectation by regulatory agencies that the City will be following good practices for a municipality of our size, such as design standards, permit requirements, record keeping, inspection staff and more.

A series of goals formulated as BMPs has been incorporated into the SMP. City staff has sought to meet the goals through a variety of programs over the last year. It is important to note that these activities will need to be tracked and are expected to be reported each year in the annual report submitted to KDHE.

This annual review of the Stormwater Management Program is an opportunity for the City Commission and the public to comment on the activities and direction the City is taking to meet the various goals of the program.

RECOMMENDATION: It is recommended that a resolution supporting the program be adopted at the Commission meeting February 27, 2018.

ATTACHMENTS:

- 2016 City Stormwater Management Program adopted February 23, 2016
- Kansas Stormwater Phase II Final Rule Fact Sheet Series
- KDHE Guidance for Completion of a Stormwater Management Program Document


RESOLUTION NO. B-2132

BE IT RESOLVED BY THE LEAVENWORTH CITY COMMISSION OF THE CITY OF LEAVENWORTH, KANSAS, AS FOLLOWS:

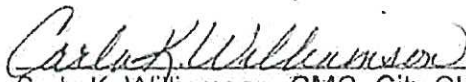
SECTION 1:

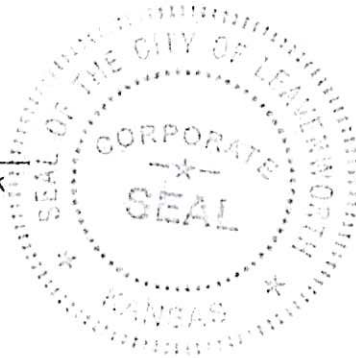
The 2016 Stormwater Management Program shall become the official guiding authority for actions by the Leavenworth City Commission and its staff until or unless changed by official action.

PASSED AND APPROVED THIS 23rd DAY OF FEBRUARY, 2016.


Larry Dedeker, Mayor

ATTEST:


Carla K. Williamson, CMC, City Clerk



POLICY REPORT PWD NO. 18-12

REVIEW DRAFT 2017 KDHE ANNUAL REPORT
FOR STORMWATER

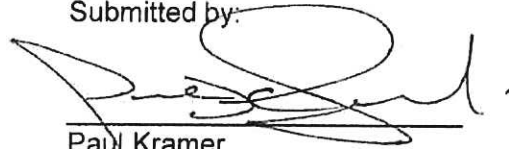
February 20, 2018

Prepared by:



Michael G. McDonald, P.E.,
Director of Public Works

Submitted by:



Paul Kramer,
City Manager

ISSUE:

Review draft annual KDHE report for 2017 stormwater activities.

BACKGROUND:

The City of Leavenworth is regulated by the Kansas Department of Health and Environment (KDHE) and US Environmental Protection Agency (EPA) as a Phase II City for stormwater purposes. The City has been required to submit an annual report on stormwater activities every year since 2003. The report is to summarize the actions the City has taken the previous year to protect and enhance stormwater quality. The guidelines for the activities to be reported on are set by the Stormwater Management Program (SMP) which was adopted by the City Commission in 2016.

The City has submitted reports in accordance with KDHE requirements in previous years. Interaction with KDHE and EPA suggest that the report be reviewed in a public forum rather than simply submitted by staff. The attached documents are a draft of the annual report for 2017. There is considerable additional information in the appendices that will be included when the report is submitted.

Staff is requesting comments and suggestions from the City Commission related to the content of the report. It is appropriate for the City Commission to seek input from the public on this matter as well.

Key narratives in the report are:

- Executive Summary
- Section C-E – (6 Minimum Control Measures)
- Section F – Recordkeeping and Reporting (Sections 1-5)
- Appendix A – Data
- Appendix C – Comments on Sampling and an Example Graph

RECOMMENDATION:

The report is due at KDHE on February 28th via digital delivery. It is recommended the City Commission adopt a resolution supporting the final draft of the report at the February 27th Commission meeting.

ATTACHMENT:

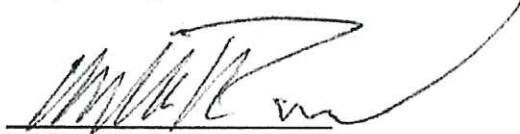
Draft Report (partial)

POLICY REPORT PWD NO. 18-13

ADOPT RESOLUTION B-2189 APPROVING
KDHE ANNUAL STORMWATER REPORT FOR 2017

February 27, 2018

Prepared by:



Michael G. McDonald, PE
Director of Public Works

Reviewed by:



Paul Kramer,
City Manager

ISSUE:

Consider adoption of Resolution B-2189 approving the KDHE Annual Stormwater Report for 2017.

BACKGROUND:

The City of Leavenworth is required by Kansas Department of Health and Environment (KDHE) and Environmental Protection Agency (EPA) to submit an annual report each year by February 28th for activity in the prior calendar year. This is to review the status of the activities identified in the Stormwater Management Program (SMP). The City adopted the current Stormwater Management Program in 2016.

The Annual Report was reviewed at the study session on February 20th, 2018. Staff is completing the final version of the report which will be available online prior to the meeting for review.

The report is due to KDHE by February 28th, 2018 via digital delivery. It is anticipated that the final report will be submitted to KDHE on Wednesday, February 28th after final review by the City Commission at the February 27th meeting.

RECOMMENDATION:

Staff recommends the City Commission adopt Resolution B-2189 approving the Stormwater Management Program.

ATTACHMENT:

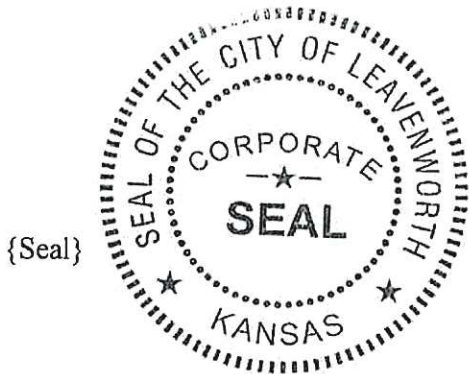
Resolution B-2189 Approving the KDHE Annual Stormwater Report for 2017

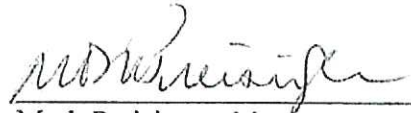
RESOLUTION NO. B-2189

BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS, AS FOLLOWS:


SECTION 1: The 2017 Annual Report for Stormwater reflects the direction, efforts and accomplishments by City of Leavenworth for calendar year 2017. It shall be an official record of these actions to meet the requirements of KDHE for an Annual Report until or unless changed by official action.

PASSED AND APPROVED This 27th Day of February, 2018.




Mark Preisinger, Mayor

ATTEST:

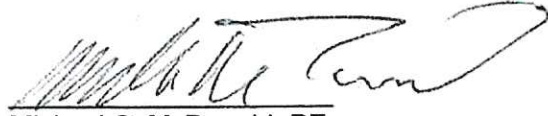

Carla K. Williamson, CMC, City Clerk

POLICY REPORT PWD NO. 18-15

**ADOPT RESOLUTION B-2190 APPROVING THE CITY
STORMWATER MANAGEMENT PROGRAM**

February 27, 2018

Prepared by:



Michael G. McDonald, PE
Director of Public Works

Reviewed by:



Paul Kramer,
City Manager

ISSUE:

Consider adoption of Resolution B-2190 approving the Stormwater Management Program.

BACKGROUND:

The City of Leavenworth is required by Kansas Department of Health and Environment (KDHE) and Environmental Protection Agency (EPA) to have a Stormwater Management Program (SMP) to address various programs to ensure national water quality. The City adopted the current Stormwater Management Program in 2016 and there were no changes in 2017.

The SMP was reviewed at the study session on February 20th, 2018.

The current SMP is required to be included in the KDHE Annual Report and submitted by February 28th via digital delivery. It is anticipated that the Annual Report (and therefore the Stormwater Management Program) will be submitted to KDHE on Wednesday, February 28th after final review by the City Commission at the February 27th meeting.

RECOMMENDATION:

Staff recommends the City Commission adopt Resolution B-2190 approving the Stormwater Management Program.

ATTACHMENT:

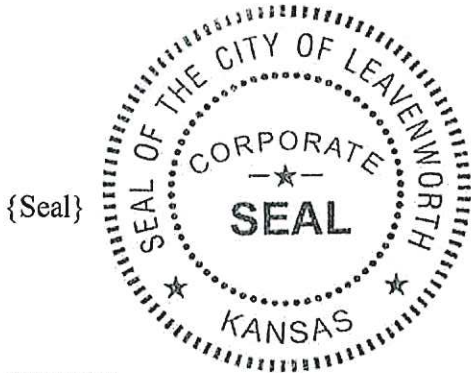
Resolution B-2190 Approving the City Stormwater Management Program

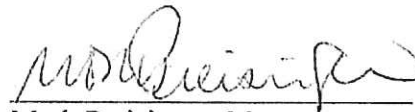
RESOLUTION NO. B-2190

BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS, AS FOLLOWS:

SECTION 1: The 2017 Stormwater Management Program shall become the official guiding authority for actions by the Leavenworth City Commission and its staff until or unless changed by official action.

PASSED AND APPROVED This 27th Day of February, 2018.




Mark Preisinger, Mayor

ATTEST:


Carla K. Williamson, CMC, City Clerk

Policy Report
Storm water fee program
April 3, 2018

Prepared by:



Paul Kramer
City Manager

Issue:

In general, a storm water system is an interconnected and interdependent collection of methods to move water away from homes, businesses, public areas, parks, parking lots, streets, etc., into areas designed to dissipate or convey water into appropriate outlets. Storm water systems are vulnerable to age, materials, development and deferred maintenance.

The City of Leavenworth storm water system includes stone arches, clay tile pipes, corrugated metal pipes, wooden culverts, open ditches, creeks, streams, detention basin and more. All aspects of that system are part of the solution, and much of the system is failing across the City. The system is wide-ranging and the majority of issues addressed by the City are not tied to individual properties. For example, the City intakes drainage from more than 300 acres of federal property north of Metropolitan Avenue. That water enters the City and must be routed safely through the system and eventually to the river (through a series of channels, culverts, pipes and three-mile creek). That specific part of the system is failing in many areas and must be addressed. A second example is 100-year-old stone arches under Fourth Street through the downtown. The cost to repair those will be in the millions of dollars, and are only a matter of when, not if, they become a necessity.

The obvious question is: how does the City fund the combined repairs to the overall system that are estimated to be \$70-\$85 million. The storm water fee is a means to address the problem fairly and equitably across all properties inside the City limits, including residential rates and tiers for commercial and industrial properties. In essence, this is a city-wide problem that requires a city-wide solution.

Background:

In 1994, the City hired Black & Veatch to complete a Storm Drainage Master Plan. The process for drafting the plan included establishing a Citizen Storm Water Advisory Committee, distributing citizen surveys, reviewing legal and technical issues, evaluating implementation of a storm water system computer model, and preparing a Capital Storm Water Improvement Master Plan. The plan was accepted by the Commission in 1997; plan recommendations included:

- The Public Works Department should increase the amount and frequency of maintenance of the storm water maintenance system, especially regarding roadside ditches.
- Evaluate the identified problems and recommendations in the water-shed subsystems outside the City boundaries.

- Analysis for the Three Mile and Five Mile Creek watersheds should be carried forward to preliminary design level analysis.
- Properly plan and develop the conveyance system and timing of improvements. The City should consider increasing its technical staff in engineering and GIS.
- Install a rainfall and stream flow monitoring system to establish peak run-off rates and flood elevations.
- **Consider the implementation of a storm water utility to fund capital improvement projects and the operation and maintenance of the drainage system.**

To this point, the City has undertaken as many of the recommendations in the report possible without an independent, substantial and guaranteed source of revenue, including:

- The Street Operations Division has been significantly more aggressive in the re-establishment of ditches and driveway tube maintenance, to include the ditching of non-curbed streets in conjunction with and prior to the asphalt overlay of the street in the pavement management program.
- Staff now reviews all site grading plans for residential subdivisions, commercial, and industrial developments with an emphasis on drainage patterns, storm water detention, water quality issues, and minimum building floor elevations.
- FEMA maps were updated in 2015 and significant improvements have been undertaken along Three Mile Creek with the construction of; the Cherokee Bridge, the Broadway Bridge, the Sixth Street Bridge, the 3 Mile Creek Trail, the replacement of the Second Street Bridge.
- Many locations identified in residential areas have been addressed throughout the years since the passing of the plan through normal maintenance and/or the replacement of infrastructure.
- GIS staff implemented a mapping and information system that rivals the quality of many larger cities.
- Rainfall and stream flow monitoring systems have been installed in various locations throughout the City and are continually monitored to provide accurate data for current construction projects and planning of future projects.

For various reasons, past City Commissions have elected not to implement a storm water program fee. In the 21 years since the Black and Veatch plan was accepted, the City's storm water system has continued to decay.

Storm water fee:

In April 2017, staff brought the issue of a dedicated storm water fee to the City Commission Goal-Setting Session. Following a May 2017 Study Session consensus to move forward with the concept, staff focused on the following areas: 1) Funding Structure; 2) Collection Methods; and 3) the Management Plan.

1) Funding Structure

During a series of public meetings in 2017 – starting at the June 6, 2017 meeting – staff brought forth three recognized methods for assessing a storm water fee, ranging from simple to complex. To recap, the initial presentation included the following:

1. Simple, set rate formula

Assess as a fee on property tax statement or monthly billing (Bonner Springs)		
Residential	\$3.00 per month	\$36.00 annually
Non-Residential	\$5.50 per month	\$66.00 annually

This method is the easiest to implement and differentiates between residential and non-residential users. However, it lacks the ability to differentiate between large and small non-residential users, which could impose larger burdens on small businesses and limit the overall ability to generate sufficient revenue to make an impact.

2. Set rate, with non-residential multiplier

Collects either monthly on the water/sewer bill or some variation (Atchison, Topeka, Hays, Hutchison use variations on this method)		
Single Family	\$4.00 per month	\$48.00 annually
Multi-family, Commercial, Industrial	\$4.00 per month per ERU	

This method differentiates between single-family in one class and multi-family residential, commercial, and industrial in another class. This method introduces the requirement to do impermeable area calculations for all non-single-family properties in the City.

3. Complex calculation including ERUs, impermeable surface calculation, etc.

Lawrence collects fees as an assessment on the property tax statement		
Total impervious surface is not known for every residential property; therefore the number of ERUs is based on building footprints as follows:		
Single Family Footprint (building sq. ft.)	ERU	Monthly Charge
Up to 1,000	.67	\$2.76
1,001 to 1,800	1.00	\$4.12
1,801 to 3,000	1.25	\$5.15
3,001 to 4,800	1.80	\$7.42
4,800 +	2.50	\$10.30
Commercial, Industrial (total area of impervious surface) \$4.12 per month per ERU		

This method creates different billing amounts for the different sizes of residences throughout the city by using the multiplier of the ERU. The use of the actual impervious surface area of the commercial and industrial allows the City to differentiate between large and small non-residential

uses. However, it does not separate multi-family from a commercial use. The complex calculations are only performed once per year for the property tax billing.

(An Equivalent Residential Unit (ERU) is the area of impervious surface on an average single family residential property, and is generally seen as a constant value across the community. The ERU value will vary by community, for example:

- *City of Lawrence ERU 2366 sq. ft.*
- *City of Topeka ERU 2018 sq. ft.*
- *City of Ottawa ERU 2600 sq. ft.*

**There is currently no ERU calculation for the City of Leavenworth)*

At the end of the process, the Commission, with input from the public and staff, selected method #1, but modified it to create more classifications. Using a calculation of impermeable area or ERUs introduces a variety of variables, including number of structures, onsite storm water management methods and other property characteristics – and would require the City to determine how to address each variable. The tiered, flat-rate system also corresponds with the concept of creating a method to properly maintain a citywide system, while not over burdening any segment of the population. Throughout 2017, and specifically following public comment at a November 2017 Study Session, that structure was again modified, and currently is reflected in the spreadsheet attached to this report.

2) Collection Methods

Throughout the public process in 2017, collection methods were discussed, at-length. There are two collection options that nearly all entities chose from: inclusion on a monthly utility bill, or as part of a property tax statement. Given the fact that the City outsources it's billing to a third party (the Leavenworth Water Department), the collection method received heightened scrutiny during the process. To recap, the collection methods are:

Monthly billings:

Staff has had discussions with water department personnel regarding the practice of collecting the fee on the monthly water department billing as is currently done with the trash and sewer charges. It is anticipated that only properties with water meters or refuse service would receive a bill. A number of items and issues associated with using waterworks were identified.

- The water department is implementing a new internet billing system. (Any impact to the billing procedure and any additional costs to the City is unknown at this time)
- The water department will charge an account set-up fee of \$15,000 - \$20,000 to set up the billing accounts for storm water and they will also charge a monthly fee in the approximate amount of five percent of monthly revenue (in addition to the fees charged to collect refuse and sewer bills). The set-up work being done by the water department personnel will take approximately four to six months to complete.
- Income from the fee would be received on a monthly basis. It is expected that failure to pay the fee would be handled by the waterworks through shut-off of the water meter, although that has been in question in the past.
- The burden of the fee payment would be on the resident, who possibly is not the property owner.

Property tax billings:

The other option discussed for collecting the fee is to place it as a fee on the annual property tax statement which is mailed to the OWNER of any property that has a building. Important details of this method are presented below:

- Fee Collection could be implemented starting July 1, 2018 provided all fees or assessments are certified to the county clerk by the 2nd week in August for inclusion on the December tax statements.
- Income from the fee would be received by the City twice a year. There are no collection fees associated with adding this fee, and failure to pay the fee is handled as a failure to pay taxes by the county.
- This method places the burden of paying the fee on the property owner who may or may not be the resident at that address.

At the end of the process, the Commission, with input from the public and staff, selected to collect the dedicated revenue through property tax billings.

3) Management Program

The implementation of the storm water fee will require the adoption of a Comprehensive Storm Water Management Program. Included is a draft outline of the program. The document identifies five program goal activities.

- Address chronic flood-prone areas with drainage improvement projects to reduce the occurrence of property flood damage.
- Review, enact, and enforce ordinances, policies, and design criteria as necessary to manage the floodplain and prevent future flooding.
- Perform routine maintenance of the City's storm drainage system to maintain its intended capacity and condition.
- Enhance water quality to preserve the natural environment while maintaining compliance with the City's Kansas Water Pollution Control Permit
- Develop a large-item capital improvement program list, potentially to include issuing debt to gain greater economies of scale

The implementation of the program will require additional staff (a project coordinator) and additional equipment for the current staff. We anticipate the following activities to occur if the fees are adopted.

1. Within six months after initiation of the fee, the hiring of a project coordinator to facilitate the Storm Water Management Program.
2. Priority ONE beginning at the initiation of the program would be to address the growing list of resident calls that have identified storm water system issues and orange

fence on their properties. (These locations can be addressed fairly expeditiously through the use of consultants and outside contractors once the funding is established.)

3. Beginning within eighteen months after implementation, staff anticipates the following additional programs to be under development:

- **Curb Inlet Replacement Program** – This would address the failing brick & concrete block curb inlets throughout the City. Most projects can be completed using city staff, although a sufficiently large number of locations will require use of a contractor to complete the work.
- **Corrugated Metal Pipe (CMP) Program** – Identify and prioritize repair of CMP. This would address the corrugated metal pipe that is in an advanced state of deterioration where lining would not be feasible. Projects of this type would be completed by outside contractors.
- **Lining Program** – In areas where “dig and replace” is not an option or recommended due to pipe condition, depth, and/or location. Projects of this type would be completed by outside contractors.
- **Brick & Stone Arch Replacement Program** – This would be a proactive program that will address the numerous very old street crossings and drainage structures throughout the City. Projects of this type would be completed by outside contractors.
- **Stream Bank & Stream Way Restoration Program** – This would be a proactive program that will address the removal of the brush and trees that are growing along the stream that inhibit the efficient flow of storm water during peak flow events. Projects of this type would be completed by City staff, inmate work crews and outside contractors.

4. Project priority sheets will be reviewed with the City Manager. It is anticipated that most projects can be addressed within the funding stream created from the fees. Larger or high priority projects may need to compete for CIP funds.

Final development of this program will include the input and expertise of the Storm Water Project Coordinator.

Next steps:

The summary included represents the status of the issue to date. The City Commission recently took a significant step toward implementation of a dedicated storm water fee with the passage of a Charter Ordinance. The next step would include the adoption of a program providing the details – substantially the items included above – in a draft ordinance. The issue is before the Commission for further discussion.

Zoning Type	Unit Annual Fee	Annual Revenue	Unit Annual Fee	Annual Revenue	Unit Annual Fee	Annual Revenue	Unit Annual Fee	Annual Revenue	Unit Annual Fee	Annual Revenue	Unit Annual Fee	Annual Revenue
Single Family												
8,829 Units	\$72.00	\$635,688.00	\$84.00	\$741,636.00	\$96.00	\$847,584.00	\$125.00	\$1,103,625.00	\$180.00	\$1,589,220.00	\$270.00	\$2,383,830.00
Duples/Multi-Family												
895 Units	\$72.00	\$64,440.00	\$84.00	\$75,180.00	\$96.00	\$85,920.00	\$125.00	\$111,875.00	\$180.00	\$161,100.00	\$270.00	\$241,650.00
	56.63%	\$700,128.00	54.47%	\$816,816.00	58.51%	\$933,504.00	59.45%	\$1,215,500.00	64.34%	\$1,750,320.00	64.12%	\$2,625,480.00
Commercial												
Total Avg - 6,000 sq. ft. CBD Avg - 1,000 sq.ft.												
45 Units < 1,500	\$325.00	\$14,625.00	\$325.00	\$14,625.00	\$325.00	\$14,625.00	\$850.00	\$38,250.00	\$1,125.00	\$50,625.00	\$2,100.00	\$94,500.00
210 Units 1,501 - 4,500	\$675.00	\$141,750.00	\$675.00	\$141,750.00	\$675.00	\$141,750.00	\$1,200.00	\$252,000.00	\$1,475.00	\$309,750.00	\$2,450.00	\$514,500.00
118 Units 4,501 - 10,000	\$1,025.00	\$120,950.00	\$1,025.00	\$120,950.00	\$1,025.00	\$120,950.00	\$1,550.00	\$182,900.00	\$1,825.00	\$215,350.00	\$2,800.00	\$330,400.00
64 10,001 - 20,000	\$1,350.00	\$86,400.00	\$1,350.00	\$86,400.00	\$1,350.00	\$86,400.00	\$1,900.00	\$121,600.00	\$2,175.00	\$139,200.00	\$3,150.00	\$201,600.00
11 20,001 - 50,000	\$2,400.00	\$26,400.00	\$2,400.00	\$26,400.00	\$2,400.00	\$26,400.00	\$2,925.00	\$32,175.00	\$3,200.00	\$35,200.00	\$4,175.00	\$45,925.00
7 50,001 - 100,000	\$4,150.00	\$29,050.00	\$4,150.00	\$29,050.00	\$4,150.00	\$29,050.00	\$4,675.00	\$32,725.00	\$4,950.00	\$34,650.00	\$5,925.00	\$41,475.00
3 100,001 - 200,000	\$5,200.00	\$15,600.00	\$5,200.00	\$15,600.00	\$5,200.00	\$15,600.00	\$5,725.00	\$17,175.00	\$6,000.00	\$18,000.00	\$6,975.00	\$20,925.00
3 over 200,000	\$6,250.00	\$18,750.00	\$6,250.00	\$18,750.00	\$6,250.00	\$18,750.00	\$6,775.00	\$20,325.00	\$7,050.00	\$21,150.00	\$8,025.00	\$24,075.00
461	35.22%	\$453,525.00	37.31%	\$453,525.00	33.69%	\$453,525.00	34.10%	\$697,150.00	30.29%	\$823,925.00	31.10%	\$1,273,400.00
Industrial												
33 Units <4,500	\$675.00	\$22,275.00	\$675.00	\$22,275.00	\$675.00	\$22,275.00	\$1,200.00	\$39,600.00	\$1,475.00	\$48,675.00	\$2,450.00	\$80,850.00
18 Units 4,501 - 10,000	\$1,025.00	\$18,450.00	\$1,025.00	\$18,450.00	\$1,025.00	\$18,450.00	\$1,550.00	\$27,900.00	\$1,825.00	\$32,850.00	\$2,800.00	\$50,400.00
12 Units 10,001 - 20,000	\$1,350.00	\$16,200.00	\$1,350.00	\$16,200.00	\$1,350.00	\$16,200.00	\$1,900.00	\$22,800.00	\$2,175.00	\$26,100.00	\$3,150.00	\$37,800.00
12 Units 20,001 - 50,000	\$2,400.00	\$28,800.00	\$2,400.00	\$28,800.00	\$2,400.00	\$28,800.00	\$2,925.00	\$35,100.00	\$3,200.00	\$38,400.00	\$4,175.00	\$50,100.00
6 50,001 - 100,000	\$4,150.00	\$24,900.00	\$4,150.00	\$24,900.00	\$4,150.00	\$24,900.00	\$4,675.00	\$28,050.00	\$4,950.00	\$29,700.00	\$5,925.00	\$35,550.00
2 100,001 - 200,000	\$5,200.00	\$10,400.00	\$5,200.00	\$10,400.00	\$5,200.00	\$10,400.00	\$5,725.00	\$11,450.00	\$6,000.00	\$12,000.00	\$6,975.00	\$13,950.00
1 over 200,000	\$6,250.00	\$6,250.00	\$6,250.00	\$6,250.00	\$6,250.00	\$6,250.00	\$6,775.00	\$6,775.00	\$7,050.00	\$7,050.00	\$8,025.00	\$8,025.00
84	8.15%	\$127,275.00	8.22%	\$127,275.00	7.80%	\$127,275.00	6.46%	\$171,675.00	5.37%	\$194,775.00	4.78%	\$276,675.00
		\$1,280,928.00		\$1,397,616.00		\$1,514,304.00		\$2,084,325.00		\$2,769,020.00		\$4,175,555.00

10,269

40 year program

\$2,087,044.00

30 year program

\$2,782,725.00

20 year program

\$4,174,088.00

Revised 2/12/2018



Welcome to

Leavenworth

Kansas

Site Search



Home

Departments

Residents

Businesses


Visitors


Media Room


Services

Contact Us

100 N. 5th St.
Leavenworth, KS 66048
[Get Directions](#)

 Phone:
(913) 682-9201

 Email Us

 Staff Directory

Stormwater public meeting planned to explain project funding May 8

April 25, 2018 | Public Information Officer

The Leavenworth City Commission has chosen a funding mechanism for major repairs to its stormwater infrastructure. To discuss the funding structure, the public is invited to an information meeting 6-7 p.m. Tuesday May 8 at Leavenworth City Hall, 100 N. Fifth St. There will be no formal presentation, but staff will be available to answer questions from the public.

In 2017, the City identified more than \$83 million in needed maintenance to the City's stormwater system. Some of the stormwater stone arches are more than 120 years old. They and other parts of the system are experiencing collapse or corrosion. The stormwater system carries rainwater away from building, roads and channels into creeks and watershed areas. Beginning in April 2017, the City held more than 10 public meetings related to the stormwater fee program.

The fees approved by the City Commission are online here.

See also: City Commission reviews Stormwater Program Policy and Funding Sources on May 2, 2017, (Policy report begins on page 26) http://www.lvks.org/egov/documents/1493738366_91936.pdf

City Commission reviews Stormwater Program Policy & Funding Sources on July 18, 2017:
http://www.lvks.org/egov/documents/1500039980_68523.pdf

Information Boards presented at previous meetings are available online:

- Key Stormwater Infrastructure Repairs over the last 5 years
- Map-Northeast Stormwater System
- Map-Northwest Stormwater System
- Map-Southeast Stormwater System
- Map-Southwest Stormwater System
- Generalized Zoning Map of Leavenworth
- Current Stormwater Infrastructure & Total Cost table
- Collection Methods Compared
- Possible Fee Structure

City of Leavenworth

Proposed Stormwater Fee (from April 17, 2018 Commission meeting)

Zoning Type	Unit Annual Fee	Annual Revenue
Single Family		
8,829 Units	\$84.00	\$741,636.00
Duplex/Multi-Family		
895 Units	\$84.00	\$75,180.00
		\$816,816.00
Commercial		
Total Avg. - 6,000 sq. ft.		
CBD Avg. - 1,000 sq.ft.		
45 Units < 1,500	\$162.50	\$7,312.50
210 Units 1,501 - 4,500	\$337.50	\$70,875.00
118 Units 4,501 - 10,000	\$512.50	\$60,475.00
64 10,001 - 20,000	\$675.00	\$43,200.00
11 20,001 - 50,000	\$1,200.00	\$13,200.00
7 50,001 - 100,000	\$2,075.00	\$14,525.00
3 100,001 - 200,000	\$2,600.00	\$7,800.00
3 over 200,000	\$3,125.00	\$9,375.00
461		\$226,762.50
Industrial		
33 Units <4,500	\$337.50	\$11,137.50
18 Units 4,501 - 10,000	\$512.50	\$9,225.00
12 Units 10,001 - 20,000	\$675.00	\$8,100.00
12 Units 20,001 - 50,000	\$1,200.00	\$14,400.00
6 50,001 - 100,000	\$2,075.00	\$12,450.00
2 100,001 - 200,000	\$2,600.00	\$5,200.00
1 over 200,000	\$3,125.00	\$3,125.00
84		\$63,637.50
		\$1,107,216.00


CONSENT FOR A SPECIAL MEETING OF THE GOVERNING BODY
OF THE CITY OF LEAVENWORTH, KANSAS

We the undersigned, being a quorum of the duly elected Commissioners of the City of Leavenworth, Kansas, do each consent to a special meeting of the Governing Body of the City of Leavenworth, Kansas, to be held at City Hall, 100 North 5th Street, Leavenworth, Kansas, on the 17th day of April, 2018 for the purpose of:

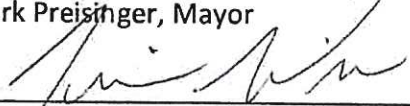
Study Session:

1. Shelter of Hope Presentation (pg. 2)
2. Westar Energy Substation Presentation (pg. 3)
3. Thornton Street Project Funding (pg. 13)
4. Storm Water Fee Review (pg. 19)

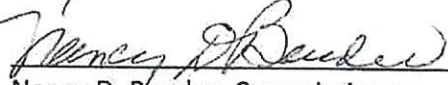
We waive written notice or call of said meeting, dated this 17th day of April, 2018.



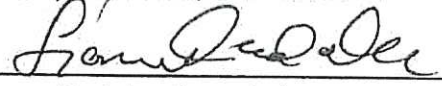
Mark Preisinger, Mayor



Jermaine Wilson, Mayor Pro-Tem



Nancy D. Bauder, Commissioner



Larry Dedeker, Commissioner



Myron J. (Mike) Griswold, Commissioner



The City Commission met for a Study Session with the following members present: Mayor Mark Preisinger, Mayor Pro-Tem Jermaine Wilson and Commissioners Nancy Bauder, Larry Dedeke and Myron J. (Mike) Griswold.

Others Present: City Manager Paul Kramer, Assistant City Manager Taylour Tedder, Public Works Director Mike McDonald, Deputy Public Works Director Mike Hooper, Police Chief Pat Kitchens, Finance Director Ruby Maline, Public Information Officer Melissa Bower and City Clerk Carla K. Williamson.

Storm Water Fee Review – City Manager Paul Kramer reviewed the Storm Water fee program. Public Works Director Mike McDonald and Deputy Public Works Director Mike Hooper were available for questions and comments.

- April 3, 2018 Study Session discussed the main elements of the program
- Commission asked Staff to come back with possible program expenditures
- Program examples were presented and dates that projects could be accomplished with various funding levels
- Examples reflected “possible” bonding in 2020
- Dollar amounts were proposed based on what other cities charge

Commissioner Griswold asked about reviewing commercial rates. Mayor Preisinger stated that at the last meeting the Commission had agreed on the commercial rates and the residential rates were still undecided.

Commissioner Griswold:

- After hearing Mr. Urban’s comments at the last meeting he has concerns about commercial property rates
- Would like to look at ½ of the rates for commercial and industrial
- Proposed Course of Action (COA) analysis
- Would require additional analysis by staff
- Would like talks with focus groups
- Residential should be at \$7.00

Commissioner Wilson

- Likes the idea of cutting business rates by ½
- Only in favor if willing to do another focus group
- If looking at commercial and industrial as large and small business why not look at residential and take into consideration the size of the residential property

Mayor Preisinger

- Wants to achieve \$1.2 million revenue at a minimum
- Leavenworth is the only city of the first class without a stormwater rate program
- Likes the fee structure that Commissioner Dedeke has come up with
- Not sure why a focus group would be needed before the decision
- It is the City Commissions job to make that decision
- Already discussed impervious area and have already made the decision of square footage for commercial and industrial



City of Leavenworth stormwater information meeting
Leavenworth City Hall, 6 p.m. May 8, 2018

<i>Name</i>	<i>E-mail or phone for future information about stormwater</i>	<i>Do you have additional questions after today's meeting?</i>
Stephen Mustain	Mailleman@Kc.RR.com	

Commission approves stormwater fees

By John Richmeier / jrichmeier@leavenworthtimes.com

Posted Jun 13, 2018 at 8:49 AM

Leavenworth city commissioners have officially approved new fees to help pay for maintenance to the city's stormwater system.

Leavenworth city commissioners have officially approved new fees to help pay for maintenance to the city's stormwater system.

During a meeting Tuesday, commissioners approved an ordinance establishing a stormwater management program and an ordinance that creates the fees to pay for the program.

The new fees are listed in an amended schedule of fees for the city.

Owners of single residential properties will be charged an annual fee of \$84 as part of the stormwater management program. Fees for commercial properties range from \$162 to

\$3,125 per year depending on the size of buildings. Fees for industrial properties range from \$337 to \$3,125 depending on the size of buildings.

The fees will appear on annual property tax bills. Because the fees are not considered a tax, they will be charged to tax exempt entities in the city.

City Manager Paul Kramer said the city should receive the first round of funds for the program in December. He said city officials will go ahead and start identifying projects to include in the first round of projects to be completed as part of the program.

City officials may begin by focusing on what Kramer referred to as “orange fence” projects, which he said affect people’s back yards.

Commissioners began looking last year at the possibility of implementing a fee to pay for repairs to the city’s stormwater system, which carries rainwater away from buildings and roads. The water is channeled into creeks and watershed areas.

City officials say they have identified more than \$83 million in needed maintenance to the stormwater system.

Commissioners had their first consideration of the two ordinances during a special meeting last week.

The two ordinances were approved Tuesday by a 4-0 vote. Commissioner Larry Dedeke was absent.

After the votes, Louis Klemp addressed commissioners during a period set aside for public comment.

Klemp is the chairman of the Leavenworth County Commission.

He questioned why city commissioners are not using a portion of the city's share of revenue from a countywide sales tax to pay for stormwater maintenance.

"It would have been nice if you'd done that," he said.

He suggested commissioners could lower the city's mill levy instead.

The mill levy is used in determining property taxes.

Twitter: [@LVTNewsJohnR](https://twitter.com/LVTNewsJohnR)

Copy to:
- All Commissioner
- City mgr
- P.W. Director



PIN OAK ACRES
apartments

August 27, 2018

City Commissioners
Leavenworth, KS 66048

RE: Storm Water Fees

Dear Commissioners,

We are writing to you asking you to reconsider the way the city is assessing the storm water fees. We make this request with the following understanding:

- We fully agree that the city's storm water system needs upgrading and that this will be expensive.
- We fully understand that you have more information and have studied and considered many ways of financing the improvements.
- We thank each of you for your service as Commissioners and respect your decisions.

Pin Oak Acres Apartments (POA) has been sponsored by St. Paul Lutheran Church & School as a non-profit organization whose purpose, from its very beginning in 1968, was to provide quality housing at an affordable cost. This purpose continues yet today, as we look to a long future of assisting others in meeting their needs for accommodation. POA has recently invested significant money in upgrades (roofs, HVAC, parking lot replacement, hallway improvements, playground, etc.), and we still keep rents affordable.

During initial preparation of the POA budget for the next fiscal year, it was determined that we should investigate to determine how much the storm water fee would cost. We reviewed the City Commission Minutes to get the rates; and subsequently checked with the Public Works Director to have a clear understanding of how the fee will be assessed.

It was explained that POA would be assessed \$84 for each of our 152 units – for a total of \$12,768 per year. This amount is excessive when the maximum that a commercial or industrial business will pay is \$3,125. It doesn't appear to be fair that POA should be paying over four times as-much-as a mammoth organization like Wal-Mart or The Home Depot pays. We are sure our revenue is not four times that of these commercial businesses. We are not responsible for four times the amount of storm water from our property.

A new motel in town that has 90 rooms for rent each night at \$100 or more per room has potentially more than \$270,000 per month in receipts. POA, on the other hand (in round numbers), has a potential receipts of only \$75,000 per month. The hotel's annual square foot assessment, even at the maximum commercial rate, will be far less than that of POA. We feel that this is not equitable.

This additional fee added to our budget makes it more difficult to continue to provide clean, well-maintained, safe and affordable homes for our tenants. POA has no revenue except what is received in rents, so the additional cost must be passed on to the tenants.

We don't necessarily have a suggestion for a change; however, we know it's important to treat entities fairly, and we do think this fee requires additional study. Thanks for your consideration.

Janice Denney, Chairperson, Board of Directors
Pin Oak Acres Apartments, Inc.

Colette Kiszka

From: Steve Grant
Sent: Wednesday, February 13, 2019 1:40 PM
To: Mike McDonald
Cc: Brian Bailey; Colette Kiszka
Subject: RE: Adopt a Park and Stream

Mike,

We currently have 15 adopted parks. We did not add any new ones in 2018, and in fact lost Union Park as adopted somewhere along the way.

We do not or ever have had to my knowledge an adopt a stream program. The 2019 3MC effort is for the stream and 3MC trail overall cleanup as a whole. I guess you could call it an adopt a stream effort if so desired.

Steve

From: Mike McDonald <MMcDonald@firstcity.org>
Sent: Wednesday, February 13, 2019 11:49 AM
To: Steve Grant <SGrant@firstcity.org>
Cc: Brian Bailey <BBailey@firstcity.org>; Colette Kiszka <ckiszka@firstcity.org>
Subject: Adopt a Park and Stream

Can you tell me where we stand with the adopt a park numbers in 2018

Also for the adopt a stream – although I think 3-Mile Creek is a 2019 effort?

Mike

Michael G. McDonald, PE

Director of Public Works
City of Leavenworth
100 N Fifth Street
Leavenworth, KS 66048
mmcdonald@firstcity.org
913-684-0375

Appendix D (Continued)

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report – Section E) (BMP Number 3)

BMP 3 – Illicit Discharge Detection and Elimination (IDDE)

- Employee Training
- Grease Trap Program
- Examples of IDDE
- Animal Control

January 23, 2018

Memo: Stormwater Training

Attendees: Mike Stephan & Justin Stewart

Learn & Earn at ESS, Kansas City, Missouri - 22 January 2018

Green Infrastructure Panel

- Jackie Maloney, Partner, Bushyhead, LLC.
- Paul Miller, Environmental Scientist, GBA
- Doug Berka, Senior Project Manager, U. S. Army Corps of Engineering
- Steve Baalman, Metro Area Engineer, KDOT-Topeka, Kansas
- Brian Hess, Director of Utilities, City of Liberty, Missouri

Discussions of Wetlands and Streambanks Mitigation

- Mitigation Bank Credits
- In-Leu Fee Program for Non-profit & Government
- Permittee Responsible

Discussion of the K-10, Baker Wetlands near South Lawrence

- KDOT Processes taken with the public and Baker University to retain the wetlands and continue the highway project.

In Summary

- The panel discussed the importance of maintaining existing wetlands when at all possible.
- The options available to recreate other areas of benefit if existing areas are to be disturbed or lost.
- The use of Mitigation Banks, in which one can create wetlands and sell credits to developers to off-set the loss of same within their developments.

The Attendees gained some further insight into protection of wetlands and streambanks.



Michael T. Stephan, PM



LEARN + EARN

CERTIFICATE OF COMPLETION



THIS CERTIFICATE IS PROUDLY
PRESENTED TO

**Justin
Stewart**

THIS DAY OF JANUARY 23TH, 2018

For participating in the 2018 ESS Learn + Earn. You have attended three continuing
education sessions earning three Professional Development Units (PDU's).

A handwritten signature in cursive script that reads 'Timothy Brauison'.

SIGNATURE

1/23/2018

DATE



Certificate of Completion

This is to certify that

Justin Stewart

participated in Webcast:

**Green Infrastructure and Stormwater
Post-Construction BMP Strategies**

Wednesday, January 31, 2018

1.0 Professional Development Hours

Shannon Burnett
Operations & Marketing Manager
V1 Media

A handwritten signature in cursive script that reads 'S Burnett'.

V1 Media is an approved provider in the American Institute of Architects (AIA) Continuing Education System
AIA Provider Number: 70118112

ROAD SHOW

CERTIFICATE OF PROFESSIONAL DEVELOPMENT

This certificate is awarded to

Justin Stewart

*For the completion of 4 Professional Development Hours
through attending the Road Show.*

2/6/2018

DATE

Bill Murphy

SIGNATURE

ASIP
ENTERPRISES *Quick Supply Co.*

ROAD SHOW

CERTIFICATE OF PROFESSIONAL DEVELOPMENT

This certificate is awarded to

Mike Stephan

*For the completion of 4 Professional Development Hours
through attending the Road Show.*

2/6/2018
DATE

Bill Murphy
SIGNATURE

ASIP
ENTERPRISES *Quick Supply Co.*

ENVIRONMENTAL TRAINING
SERVICES, LLC

HEREBY CERTIFIES THAT

Justin Stewart

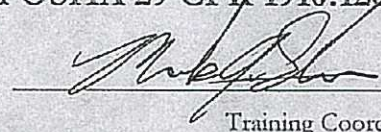
has successfully completed

**HAZMAT REFRESHER TRAINING
(8-HOURS)**

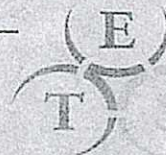
In accordance with the requirements of OSHA 29 CFR 1910.120

February 9, 2018

Date



Training Coordinator



ENVIRONMENTAL
TRAINING SERVICES

ENVIRONMENTAL TRAINING
SERVICES, LLC

HEREBY CERTIFIES THAT

Barry Smith

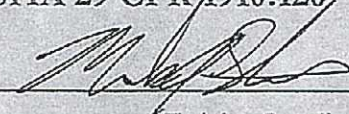
has successfully completed

**HAZMAT REFRESHER TRAINING
(8-HOURS)**

In accordance with the requirements of OSHA 29 CFR 1910.120.

February 9, 2018

Date



Training Coordinator



**ENVIRONMENTAL TRAINING
SERVICES, LLC**

HEREBY CERTIFIES THAT

Barry Smith

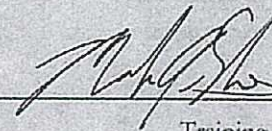
has successfully completed

**Confined Space Entry
(8-HOURS)**

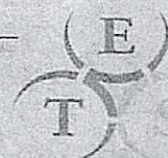
In accordance with the requirements of OSHA 29 CFR 1910.146

February 16, 2018

Date



Training Coordinator



ENVIRONMENTAL
TRAINING SERVICES

**ENVIRONMENTAL TRAINING
SERVICES, LLC**

HEREBY CERTIFIES THAT

Justin Stewart

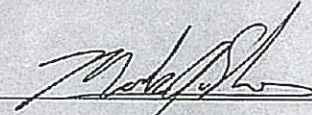
has successfully completed

**Confined Space Entry
(8-HOURS)**

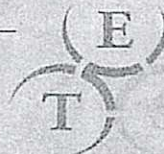
In accordance with the requirements of OSHA 29 CFR 1910.146

February 16, 2018

Date



Training Coordinator



ENVIRONMENTAL
TRAINING SERVICES



Certificate of Completion

This is to certify that

Justin Stewart

has participated in

Engineered Earth Armoring Solutions: An Alternative to Rock Riprap

Date Completed: February 22, 2018

1.0 Professional Development Hours

Shannon Burnett
Operations and Marketing Manager
V1 Media

A handwritten signature in cursive script that reads 'S. Burnett'.

V1 Media is an approved provider in the American Institute of Architects (AIA) Continuing Education System
AIA Provider Number: 70118112

Join us for a Lunch and Learn on Integration of Green Infrastructure with Alternative Goals and Project Types

February 23rd, 2018
11:30am to 1:00pm

1 PDH given to attendees | Lunch to be provided

CDM Smith Office
9200 Ward Parkway, Suite 320
Kansas City, MO 64114

2/23/18

MIKE KOOPER & MIKE STEPHAN
Attended this Stormwater
Related Lunch & Learn.

DESCRIPTION: Over the past decade, green infrastructure (GI) has become more commonplace throughout the nation as a means of promoting stormwater quality. Often GI is constructed to meet regulatory MS4 requirements; however, multiple benefits can be achieved when it is integrated into other, larger projects—such as transportation or flood control projects. This presentation will focus on CDM Smith's wealth of national and local GI experience, providing project summaries and lessons learned. In addition, there are multiple funding mechanisms available now to creatively fund GI, which will be covered in this presentation as well.

SPEAKERS:

Seth Nehrke, PE, D.WRE

Mr. Nehrke is a water resource engineer and project manager with experience in green infrastructure and low impact development, stream restoration, stormwater management planning, modeling, design, construction, and operations. His experience includes both urban and rural hydrology and hydraulics, project permitting and permit compliance, and stream and ecosystem restoration.

Jessi Veach, PE, ENV SP

Ms. Veach brings more than a decade of experience in infrastructure and stormwater design, hydrologic and hydraulic modeling and analysis, erosion control, utility planning and environmental permitting.

Matthew Scott, PE, CFM

Mr. Scott is a water resources engineer with over 10 years of experience in technical and management experience specializing in water resources projects, including green infrastructure. He has a strong hydrologic and hydraulic modeling background and is proficient in producing studies which help address existing flooding issues and prepare communities for future needs.

**CDM
Smith**
cdmsmith.com

TO RSVP, CONTACT:

Michael Odrowski

(816) 412-3107 | OdrowskiML@cdmsmith.com

Clean and Green 2018 - ASP Enterprises & Quick Supply Co.

"Grow With Us"

Location: Omaha	Tuesday, Feb. 27, 2018
Des Moines	Wednesday, Feb. 28, 2018
Kansas City	Thursday, Mar. 1, 2018
St. Louis	Friday, Mar. 2, 2018

	<u>Topic</u>	<u>Speaker</u>
7:00	Registration	
8:00	Welcome	Bill Murphy
STREAMBANK STABILIZATION		
Alternatives to Rip Rap		
8:15	TRMs	Shannon Leech, NAG/Western Excelsior
	TRM info & local projects	
8:45	HP-TRMs & Transition Mats	Shannon Leech, NAG/Western Excelsior
	PP5-Xtreme & ShoreMax	
9:00	Flexamat	Ron Geater, Motz Enterprises
	Case Studies & Lessons Learned	
9:45	BREAK (15 min.)	
STREAMBANK STABILIZATION		
Vegetation Management		
10:00	Tensar Sierra Slope	Scott Phillips, P.E., Tensar
	Vegetated Solutions	
10:45	Profile Proganics	Adam Popenhagen & Pat Holubetz
	Vegetated solutions	
11:15	Biosol and other additives	Tom Bowman, Rocky Mtn Bio-Prod.
	Vegetated solutions	
11:45	LUNCH (45 min.)	Eat at facility; visit w exhibitors
STREETSCAPES		
12:30	PaveDrain	Doug Buch, PaveDrain
	Case Studies & Lessons Learned	
1:00	FocalPoint	Bill Murphy, P.E., ASP/QS/BCS
	Installations & Lessons Learned	
1:20	Rain Guardian	Bill Murphy, P.E., ASP/QS/BCS
	Curbside pretreatment device	
1:30	Preserver	Momentum Environmental
	Stormwater quality in-line unit	
2:00	BREAK (15 min.)	
STREETSCAPES		
2:15	PRETX (by ACF)	Bill Murphy, P.E., ASP/QS/BCS
	Curbside pretreatment device	
2:20	Suntree Technologies	Evan Selbiger, Suntree Tech.
	High-Cap. Curb Inlet Basket & more	
2:50	Giveaways, survey & PDH certs	Bill Murphy
3:00	Closing	Bill Murphy

ATTENDEES

MIKE STEPHAN
of BARRY SMITH

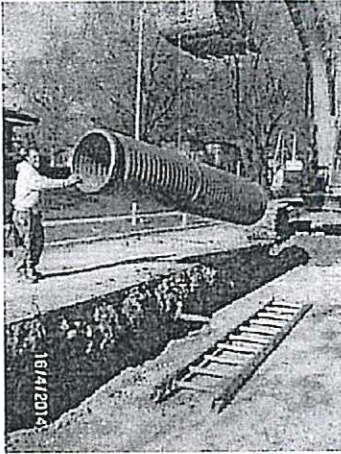
3/1/18

Date	Project/Meeting Name:		Project No:
2/27/18	LUNCH & LEARN Stormtrap Demo		
Name	Company	Phone	Email
MMW Mike McDonald	City of Leavenworth	913.684.0356	mmcdonald@firstcity.org
MH Mike Hooper	City of Leavenworth	913.684.0396	mhooper@firstcity.org
MS Mike Stephan	City of Leavenworth	913.684.0392	mstephan@firstcity.org
JS Justin Stewart	City of Leavenworth	913.684.0368	jstewart@firstcity.org
BS Barry Smith	City of Leavenworth	913.684.0373	bsmith@firstcity.org
C Staples	City of Leavenworth	913-682-1090	cstaples@firstcity.org
T Guardado	City of Leavenworth	913.682.1090	TGuardado@firstcity.org
Dennis Visocsky JR.	City of Leavenworth	913-682-0650	DX359@hotmail.com
DAVE MCKEWRICK	City of Leavenworth	435-841-2788	N/A
DAVID NOLTE	PNC RHODES	816-898-6510	david.nolte@ibhc.com
XXXXXXXXXXXX			
Kristen Leathers	Affinis Corp	913-239-1122	kleathers@affinis.us
Ryan Stobaugh	Affinis Corp	913-239-1105	rstobaugh@affinis.us



Lunch and Learn

March 6th, 2018 11:30 – 1 PM



ADS Technologies and Products for Water Management Solutions

Topics Covered:

- HP Storm Polypropylene Storm/Sanitary Sewer Pipe Technologies
- Nyloplast Drain Basins
- General information about product performance, design and installation

Presented by Garrett Klingler, P.E.
Regional Engineer with ADS, Inc.



**Lunch and PDH Credit will be provided

Sign-In Sheet

ADS Lunch & Learn – Leavenworth, KS

790 Thornton
Leavenworth
↳ Prods

March 6, 2018

- Deputy Director

Name	Title	Email	PDI
PHAN, CITY OF LEAVENWORTH	PROJECT MANAGER	Steph mstephan@firstcity.org	
STEWART, CITY	CET. II	JSTEWART@FIRSTCITY.ORG	✓
Visocky / CITY	Storm Water	@X359@hotmail.com	✓
Smith	Engineer Technician	Bsmith@FIRSTCITY.ORG	✓
MCKENDRICK / CITY	STORM WATER	N/A	✓
KE TransSystems	Project manager	dspark@transystems.com	
NOLTE, BHC RHODES	PROJECT MANAGER	david.nolte@ibhc.com	

YOU'RE INVITED



KANSAS DAM SAFETY CONFERENCE March 6, 2018

MANHATTAN, KANSAS

Four Points by Sheraton, 530 Richards Drive, Manhattan

Cost to attend the conference is \$60 per person

A block of hotel rooms is available at the Four Points by Sheraton at a rate of \$93 plus tax.

The block will be held until February 8 and is listed as the Kansas Department of Agriculture.

Please contact the hotel directly at 785-539-5311.

REGISTER HERE

The conference registration fee covers speakers, a hot breakfast, lunch, refreshments during breaks and professional development hours.

The objective of this conference is to educate attendees on regulations, technical topics, public safety, and issues affecting water structures in the state. A major focus will be to bring public awareness to the possible risks of lives, property and the environment from dam failure. This conference will encourage the implementation of site investigation, design, construction, operation, maintenance and emergency preparedness for dam owners, licensed engineers and agency officials.

- 7:00 AM DOORS OPEN – Hot Breakfast
- 8:00 AM Welcome – Terry Medley, Water Structures Program Manager, Division of Water Resources, Kansas Department of Agriculture
Kansas Water Vision – Susan Metzger, Deputy Secretary, Kansas Department of Agriculture
- 8:30 AM Plans and Specifications – Terry E. Arnold, P.E., AECOM
- 10:00 AM BREAK
- 10:30 AM United States Army Corps of Engineers (USACE) Levee Safety Program –
Jennifer Wood, Geologist, National Levee Inventory and Review Effort Liaison,
and Geoffrey Henggeler, P.E., Kansas City District Levee Safety Program Manager
- 11:00 AM Dam Rehabilitation Alternatives – Kevin L. Shamburg, P.E., KLA Environmental Services, Inc.
- 11:30 AM What is 2D Modeling, and Why Should I Care? – Ben Rufenacht, P.E., Wood plc,
formerly Amec Foster Wheeler
- 12:00 PM LUNCH
- 1:00 PM Construction Inspections – Terry E. Arnold, P.E., AECOM
- 2:30 PM BREAK
- 3:00 PM Kansas Stream Mitigation Guidelines – Thomas Schumann, Kansas State Program Manager, USACE
- 3:30 PM Woodson County State Fishing Lake Auxiliary Spillway Modeling – Donald Baker, P.E.;
Jerry Richardson, Ph.D., P.E.; and Jonathon Daldalian, E.I., Water Resource Solutions, LLC
- 4:45 PM ADJOURN

1386
6403

Order Summary

Item Description	Quantity	Amount
1	1	\$60.00
Order Total		\$60.00

E-FILE



Reference #	13077173
Status	Confirmed
Order Total	\$60.00
Payment Status	60.00
Number of Attendees *	1
Please provide your name: *	Michael G. McDonal
Agency or Organization Name *	City of Leavenworth Public Works
Street Address *	100 N. 5th Street
City *	Leavenworth
State *	KS
Zip Code *	66048-4876
Telephone Number	9136840375
Email Address	mmcdonald@firstcity.org
Last Update	2018-01-25 09:46:11
Time	2018-01-25 09:43:35
Finish Time	2018-01-25 09:45:00
IP	Anonymous
Browser	Other
OS	Other
Referrer	N/A



WATER QUALITY SEMINAR

March 9, 2018

9:00 a.m. - 4:00 p.m.

Ramada Inn

420 SE 6th Avenue, Topeka, Kansas

8:30 AM	Registration
9:00 – 9:15 AM	Welcome <ul style="list-style-type: none">• Tom Stiles
9:15 – 9:45 AM	BOW Update with MS4, NPDES Rule, et al <ul style="list-style-type: none">• Tom Stiles
9:45 – 10:00 AM	BREAK
10:00 – 10:30 AM	Industrial WWT Issues – 316b, Drinking Water Plant Discharges, Concrete Ready Mix Plants <ul style="list-style-type: none">• Don Carlson
10:30 – 11:00 AM	Water Quality Standards/Regulations – Status and Update <ul style="list-style-type: none">• Trevor Flynn
11:00 – 11:30 AM	Nutrient TMDLs – Status and Update <ul style="list-style-type: none">• Michelle Probasco
11:30 – 11:50 AM	NPDES Electronic Reporting Rule - Update <ul style="list-style-type: none">• Ann D'Alfonso
11:50 – 1:00 PM	LUNCH
1:00 – 1:30 PM	Kansas Municipal WWT – Update <ul style="list-style-type: none">• Rod Geisler
1:30 – 2:00 PM	Emerging Industrial Pre-Treatment Issues <ul style="list-style-type: none">• Steve Caspers
2:00 – 2:30 PM	Developing a Waste Stream Summary Review <ul style="list-style-type: none">• Dan Clair
2:30 – 2:45 PM	BREAK
2:45 – 3:15 PM	Public Water Supply Permitting Update <ul style="list-style-type: none">• Dan Clair
3:15 – 3:40 PM	Clean Water & Drinking Water SRF Programs and Funding Updates <ul style="list-style-type: none">• William Carr
3:40 – 4:00 PM	Wrap Up Questions and Discussion <ul style="list-style-type: none">• Available KDHE staff will remain for questions and discussions.

Colette Kiszka

From: Mike McDonald
Sent: Tuesday, March 06, 2018 8:48 AM
To: Colette Kiszka
Subject: FW: Transaction Receipt from KANSAS SOCIETY OF PROFESSIONAL for \$70.00 (USD)

From: Auto-Receipt [<mailto:noreply@mail.authorize.net>]
Sent: Tuesday, March 6, 2018 8:46 AM
To: Mike McDonald
Subject: Transaction Receipt from KANSAS SOCIETY OF PROFESSIONAL for \$70.00 (USD)

Kansas Society of Professional Engineers Receipt for Payment

Order Information

Description: Registration for "Water Quality Seminar" (9 Mar 2018 7:00 AM, Ramada Downtown Topeka), KSPE Member

Invoice Number 00104
Customer ID 41027758

Billing Information

Colette Kiszka
100 N. 5th Street
Leavenworth, Kansas 66048-4876
US
mmcdonald@firstcity.org
9136840375

Shipping Information

Item	Name	Description	Qty	Taxable	Unit Price	Item Total
00104	Invoice #00104	Registration for "Water Quality Seminar" (9 Mar 2018 7:00 AM, Ramada Downtown Topeka), KSPE Member	1	N	\$70.00 (USD)	\$70.00 (USD)

Total: \$70.00 (USD)

Payment Information

Date/Time: 6-Mar-2018 6:46:07 PST
Transaction ID: 40580649758
Payment Method: Visa xxxx7201
Transaction Type: Purchase
Auth Code: 042984

Merchant Contact Information

KANSAS SOCIETY OF PROFESSIONAL
TOPEKA, KS 66612

Certificate of Completion

presented by



This certifies that

JUSTIN STEWART

attended the **1.0-Hour Technical Seminar** presented by
Contech Engineered Solutions LLC
on April 2, 2018

This program covered technical issues relevant to the engineering profession as outlined below:

Program sponsored by: **City of Leavenworth, Public Works Dept**
Presented by: Bill Gonzalez, Contech
Discussion Included: 30 Year Old Aluminized CMP
Duration: 1.0 hours

Bill Gonzalez

CONTECH Engineered Solutions

*Please check with your governing board to confirm this method of education meets registration requirements.

Certificate of Completion

presented by



This certifies that

Barry Smith

attended the **1.0-Hour Technical Seminar** presented by
Contech Engineered Solutions LLC
on April 2, 2018

This program covered technical issues relevant to the engineering profession as outlined below:

Program sponsored by: **City of Leavenworth, Public Works Dept**
Presented by: **Bill Gonzalez, Contech**
Discussion Included: **30 Year Old Aluminized CMP**
Duration: **1.0 hours**

Bill Gonzalez

CONTECH Engineered Solutions

*Please check with your governing board to confirm this method of education meets registration requirements.



Certificate of Completion

This is to certify that

Justin Stewart

has participated in

Evaluation of Media-Based Stormwater Filtration Systems

Date Completed: April 2, 2018

1.0 Professional Development Hours

Shannon Burnett
Operations and Marketing
Manager V1 Media

A handwritten signature in cursive script that reads 'ABurnett'.

V1 Media is an approved provider in the American Institute of Architects (AIA) Continuing Education System
Course: PDH032018AIA
Provider Number: 70118112

Certificate of Completion

presented by



This certifies that

MICHAEL T. STEPHAN SR.

attended the **1.0-Hour Technical Seminar** presented by
Contech Engineered Solutions LLC
on April 2, 2018

This program covered technical issues relevant to the engineering profession as outlined below:

Program sponsored by: **City of Leavenworth, Public Works Dept**
Presented by: Bill Gonzalez, Contech
Discussion Included: 30 Year Old Aluminized CMP
Duration: 1.0 hours

Bill Gonzalez

CONTECH Engineered Solutions

*Please check with your governing board to confirm this method of education meets registration requirements.

City of Leavenworth Travel Request Form

Name:	JUSTIN STEWART	Department:	PUBLIC WORKS - ENGINEERING
Destination:	WICHITA, KANSAS		
Purpose of Trip:	CONSTRUCTION STORMWATER TRAINING		
Departure Date:	5/1/18	Return Date:	5/3/18
Departure Time:	4:5:00 pm	Return Time:	4:5:00 pm

Provide a copy of the registration material. The per diem allowance for meals paid through the registration fee will be deducted from the per diem advanced to the traveler.

Estimate of Travel Expense

			Cost
6301 Airfare	Vendor:	N/A	—
6302 Lodging	Vendor:	CLARION INN, 5500 W. KELLOGG DR. WICHITA, KS 67209	\$79.00 x 2 = \$158 PLUS TAX
6306 Vehicle Rental	Vendor:	N/A	—
6403 Registration	Vendor:	KANSAS STATE POLYTECHNIC - CIT PROGRAM	\$275.00
6303 Per Diem	Leave blank – calculated by Finance		
Total – Leave blank – calculated by Finance			

Upon approval by the City Manager, checks for Per Diem will automatically be issued.

The Department must prepare invoice entry for Airfare, Lodging, Registration and Vehicle Rental at the appropriate time unless it is being paid with a City credit card. The only documentation that must be attached to the payment voucher is a copy of this completed (and approved) form.

If you are requesting a vehicle rental, explain why:

N/A

CM OK:

	2-13-18 Date		2/13/18 Date
	2-13-18 Date		

City of Leavenworth Travel Request Form

Name:	BARRY SMITH	Department:	PUBLIC WORKS - ENGINEERING
Destination:	WICHITA, KANSAS		
Purpose of Trip:	CONSTRUCTION STORMWATER TRAINING		
Departure Date:	4/29/18	Return Date:	5/1/18
Departure Time:	+/- 5:00pm	Return Time:	+/- 5:00pm

Provide a copy of the registration material. The per diem allowance for meals paid through the registration fee will be deducted from the per diem advanced to the traveler.

Estimate of Travel Expense

			Cost
6301 Airfare	Vendor:	N/A	—
6302 Lodging	Vendor:	CLARION INN, 5500 W. KELLOGG DR. WICHITA, KS 67209	\$158 PLUS TAX
6306 Vehicle Rental	Vendor:	N/A	—
6403 Registration	Vendor:	KANSAS STATE POLYTECHNIC - CIT PROGRAM	\$275.00
6303 Per Diem	Leave blank - calculated by Finance		
Total - Leave blank - calculated by Finance			

Upon approval by the City Manager, checks for Per Diem will automatically be issued.

The Department must prepare invoice entry for Airfare, Lodging, Registration and Vehicle Rental at the appropriate time unless it is being paid with a City credit card. The only documentation that must be attached to the payment voucher is a copy of this completed (and approved) form.

If you are requesting a vehicle rental, explain why:

N/A

CM OK:

	2/13/18 Date		2/13/18 Date
		2-18-18 Date	

Colette Kiszka

From: Michael Stephan
Sent: Tuesday, February 13, 2018 3:27 PM
To: Colette Kiszka
Cc: Justin Stewart; Barry Smith
Subject: K-State Polytechnic KDOT Training

Colette,

Regarding the "Construction Stormwater Training" that I am requesting for Justin Stewart and Barry Smith, the following is a short outline of the course:

- 2-day course
- 1st day in classroom (8:00 am to 5:00 pm)
- 2nd day in classroom and outdoor field training (8:00 am to 5:00 pm)
- Per the course coordinator, they provide snacks and only one meal.
- Thus meals will be needed from travel day evening, 2 meals each for day one and day two.
- The field portion of the class requires that you wear boots and normal inspection clothing.
- The hotel is for the night before the class and the night between day one and day two.
- Travel day/evening prior to 1st day, travel home end of 2nd day.

This class is the gain further knowledge of stormwater erosion control methods and record keeping.

Thanks,

Mike S.

Mike Stephan
Project Manager
City of Leavenworth
100 North 5th Street
Leavenworth, Kansas 66048
Office: 913-684-0392
Cell: 913-547-2166
Fax: 913-684-1521
mstephan@firstcity.org

Kansas State Polytechnic

Construction Stormwater Training (CST)

Course Description:

This course is required by the Kansas Department of Transportation for individuals conducting site inspections for compliance with the KDHE general permit, contractor personnel designated as project Water Pollution Control Managers, and KDOT personnel with responsibility for SWPPP review and approval. This certification is valid for four years from completion of the course.

Learning Objectives:

- Basic principles of erosion, sediment control and non-stormwater/waste management control
- NPDES Permit Requirements
- Stormwater related KDOT plans, specifications and procedures
- Inspection requirements and procedures
- Common compliance issues
- BMP Installation and Inspection (field demonstration)

Book:

Workbook included in course fee

You Must Bring:

Notebook

Pencil

What To Wear:

You should dress appropriately for the field component on the second day.

Testing Information:

Exam: This course requires a written exam.

Score: A score of 70% or higher is needed to pass.

Construction Stormwater Training		Start Time				
Full Course	Cost: \$275.00	M	T	W	T	F
10/09/2017 - 10/10/2017	Wichita Airport Inn, Wichita, KS	8:00AM	7:30AM			
10/11/2017 - 10/12/2017	Wichita Airport Inn, Wichita, KS			8:00AM	7:30AM	
03/19/2018 - 03/20/2018	Wichita Airport Inn, Wichita, KS	8:00AM	7:30AM			
03/21/2018 - 03/22/2018	Wichita Airport Inn, Wichita, KS			8:00AM	7:30AM	
04/30/2018 - 05/01/2018	Wichita Airport Inn, Wichita, KS	8:00AM	7:30AM			
05/02/2018 - 05/03/2018	Wichita Airport Inn, Wichita, KS			8:00AM	7:30AM	
06/06/2018 - 06/07/2018	Wichita Airport Inn, Wichita, KS			8:00 AM	7:30AM	

Kansas Department of Revenue

Sales and Use Tax Entity Exemption Certificate

The Kansas Department of Revenue certifies this entity is exempt from paying Kansas sales and/or compensating use tax as stated below.

Kansas Exemption Number: KS2EC23FC2

Expiration Date: 10/01/2020

The tax-exempt entity understands and agrees that if the tangible personal property and/or service are used other than as stated, or for any purpose that is not exempt from the tax, the tax exempt entity is liable for the state and local sales or use tax. The unlawful or unauthorized use of this certificate is expressly prohibited, punishable by fine and/or imprisonment. The certificate is issued for the sole use of the exempt entity as named.

City of Leavenworth
100 N. 5th Street

Leavenworth, KS 66048



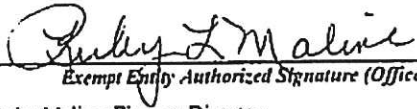
EXEMPT ENTITY INFORMATION:

Authorization and scope:

- K.S.A 79-3606(b) & (d) - State of Kansas, political subdivisions of the state of Kansas (Kansas cities, counties, townships, special districts), nonprofit hospitals, and blood, tissue, or organ banks.
- Exemption applies to all direct purchase, rental or lease of tangible personal property and services, except purchases made for any business activity specifically taxable and indirect purchases by a contractor for a real property project except as noted below.

Limitations:

- Only direct purchases are exempt through the use of this certificate.
- Except for state government, this entity qualifies for exemption on indirect purchases by a contractor through the issuance of a Project Exemption Certificate (PEC). Apply on-line at KDOR's web site: www.ksrevenue.org. The only State of Kansas agency allowed a PEC is a Kansas correctional institution. Indirect purchases by all other state agencies are subject to sales tax.
- This exemption does not apply to the purchase of any construction machinery, equipment or tools by a contractor used in constructing, maintaining, repairing, enlarging, furnishing or remodeling facilities for the exempt entity.
- All purchases of goods and services used in a business that is specifically taxable by the Sales Tax Act are subject to tax. This includes operation of a utility, restaurant, and selling of goods or services at retail.


Exempt Entity Authorized Signature (Officer, Office Manager or Administrator)

Ruby Maline, Finance Director

Printed Name

48-6034051

Federal ID Number

04/11/16

Date

RETAILER INFORMATION:

- To qualify for exemption, the certificate must have an expiration date in the future and be signed by an authorized individual.
- Payment must be made by the entity on their checking account or on a credit/debit card issued to the entity. Acceptance of cash, personal checks, or personal credit/debit cards is not allowed for a tax exempt purchase.
- The entity must have a Kansas exemption certificate. Exemption certificates issued by other states are not valid in Kansas.
- Retailers are required to maintain a copy of the purchaser's certificate in their records for at least 3 years from the date of purchase. Retailers must maintain a current certificate on file.
- Selling tax exempt goods or services that are not exempt by statute may result in the assessment of tax.
- A completed certificate may be used as a blanket exemption for future purchases when of the same type and for the same exempt purpose.

Seller's name and address

Description of goods and/or services purchased

For additional information on Kansas sales and use taxes see Publication KS-1510, *Kansas Sales Tax and Compensating Use Tax* and Publication KS-1520, *Kansas Exemption Certificates*, located at: www.ksrevenue.org. Questions would be directed to Taxpayer Assistance at 785-368-8222.

STATE OF KANSAS



Department of Transportation
 Bureau of Construction and Materials
 Dwight D. Eisenhower State Office Building
 1 S.W. Harrison Street
 Topeka, KS 66603-3745
 Greg M. Schieber, P.E., Chief

Phone: 785-296-3576
 Fax: 785-296-6944
 kdot#publicinfo@ks.gov
 http://www.ksdot.org

GOVERNOR JEFF COLYER, M.D.
 RICHARD CARLSON, SECRETARY

May 07, 2018

KANSAS DEPARTMENT OF TRANSPORTATION
 CERTIFIED INSPECTOR TRAINING PROGRAM

Barry Smith

Name

This person is certified to perform construction inspection
 or testing on projects under Kansas Department of
 Transportation Standard Specification.

Identification Number 5328

Leon J. Kovan

Course	Exp. Date	Course	Exp. Date	Course	Exp. Date
AGF	_____	SF	_____	MSA	_____
AGL	_____	SD	_____	NUC	_____
PO	_____	SOF	_____	EIT	_____
CMC	_____	PDI	_____	EMT	_____
API	_____	CF	_____	QCA	_____
GPI	_____	CST	_____	QCS	_____
BI	_____	Statistics	_____	DSI	_____
AMI	_____	TCI	_____	CSW	05/01/2022
STR	_____	CMA	_____	HCP	_____
IGS	_____	CMB	_____	PMA	_____
UFT	_____	402	_____	CMF	_____
PM	_____	BLC	_____	OD	_____

Department of Transportation
 Bureau of Construction and Materials
 Dwight D. Eisenhower State Office Building
 700 S.W. Harrison Street
 Topeka, KS 66603-3745
 Greg M. Schieber, P.E., Chief

STATE OF KANSAS



Phone: 785-296-3576
 Fax: 785-296-6944
 kdot#publicinfo@ks.gov
 http://www.ksdot.org

GOVERNOR JEFF COLYER, M.D.
 RICHARD CARLSON, SECRETARY

May 08, 2018

KANSAS DEPARTMENT OF TRANSPORTATION
 CERTIFIED INSPECTOR TRAINING PROGRAM

Justin Stewart

Name

This person is certified to perform construction inspection
 or testing on projects under Kansas Department of
 Transportation Standard Specification.

Identification Number 3439

Course	Exp. Date	Course	Exp. Date	Course	Exp. Date
AGF	_____	SF	_____	MSA	_____
AGL	_____	SD	_____	NUC	_____
PO	_____	SOF	_____	EIT	_____
CMC	_____	PDI	_____	EMT	_____
API	03/01/2023	CF	_____	QCA	_____
CPI	03/02/2023	CST	_____	QCS	_____
BI	02/27/2023	Statistics	_____	DSI	_____
AMI	_____	TCI	_____	CSW	05/03/2022
STR	02/28/2023	CMA	_____	HCP	_____
ICS	_____	CMB	_____	PMA	_____
UFT	_____	402	_____	CMF	_____
PM	_____	BLC	_____	OD	_____

STATE OF KANSAS



Department of Transportation
Bureau of Construction and Materials
Dwight D. Eisenhower State Office Building
100 S.W. Harrison Street
Topeka, KS 66603-3745
Greg M. Schieber, P.E., Chief

Phone: 785-296-3576
Fax: 785-296-6944
kdot#publicinfo@ks.gov
http://www.ksdot.org

GOVERNOR JEFF COLYER, M.D.
RICHARD CARLSON, SECRETARY

May 07, 2018

Barry Smith
City Of Leavenworth: Leavenworth
100 N 5th Street
Leavenworth, KS 66048-4876

Dear Barry:

Congratulations on your successful completion of the **Construction Stormwater Class Course** in regards to the Certified Inspection and Testing Training Program.

Before your expiration date, it will be your responsibility to renew your certification.

The time and effort you have spent in this training and your interest in the Certified Inspection and Testing Training Program is appreciated.

If you have any questions, please contact me at 785-291-3836 or lora.kowach@ks.gov.

Sincerely,

A handwritten signature in cursive script that reads "Lora J. Kowach".

Lora J. Kowach
CIT Program Administrator

Enc.

Department of Transportation
Bureau of Construction and Materials
Dwight D. Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3745
Greg M. Schieber, P.E., Chief

STATE OF KANSAS



Phone: 785-296-3576
Fax: 785-296-6944
kdot#publicinfo@ks.gov
<http://www.ksdot.org>

GOVERNOR JEFF COLYER, M.D.
RICHARD CARLSON, SECRETARY

May 08, 2018

Justin Stewart
City Of Leavenworth: Leavenworth
100 N. 5th Street
Leavenworth, KS 66048-4876

Dear Justin:

Congratulations on your successful completion of the **Construction Stormwater Class** Course in regards to the Certified Inspection and Testing Training Program.

Before your expiration date, it will be your responsibility to renew your certification.

The time and effort you have spent in this training and your interest in the Certified Inspection and Testing Training Program is appreciated.

If you have any questions, please contact me at 785-291-3836 or lora.kowach@ks.gov.

Sincerely,

A handwritten signature in cursive script that reads "Lora J. Kowach".

Lora J. Kowach
CIT Program Administrator

Enc.



Certificate of Completion

This is to certify that

Justin Stewart

has participated in

How to Design a Culvert Reline Project

Date Completed: August 7, 2018

1.0 Professional Development Hours

Shannon Burnett
Operations & Marketing
Manager
V1 Media

V1 Media is an approved provider in the American Institute of Architects (AIA) Continuing Education System
AIA Provider Number: 70118112
Course ID: PDH2_052018



City of Leavenworth
Grease Prevention Program
2018 Summary

February 12, 2019

The City of Leavenworth's Building Inspections Office continues to oversee a grease trap/interceptor inspection and maintenance program as part of the effort to prevent backups in the sewer lines. This effort is expected to reduce the number of instances where the contents of the sanitary sewer overflowed into homes, yards or streets.

The ongoing efforts include the following general activity:

1. Contact property owners and tenants whose buildings require a grease trap/interceptor with a letter informing them that the devices are required and that the devices require routine maintenance to operate properly
2. Perform annual inspections of the grease traps/interceptors to ensure that they are installed and maintained correctly
3. Communicate the need for routine maintenance by sending letters, requesting copies of maintenance records

Utilizing records from 2017, there were 54 businesses identified at the beginning of 2018 that staff believed may require a grease trap/interceptor.

The program goal was to send two letters to each business during the 2018 calendar year. One letter requested copies of maintenance records, and the second letter requested that the establishment contact the Building Inspection office and schedule an inspection of the grease trap/interceptor at their location, Approximately 100 letters were sent in 2018.

As a result of the response from the letters, staff determined that there are now 53 businesses that may require grease trap/interceptor. One establishment were removed from the list after additional information was received.

Staff performed 27 documented inspections on grease traps in 2018. Two establishments that were required to, but did not have a grease trap/interceptor previously, hired plumbing contractors and had grease traps installed in 2018.

Additional businesses were visited to verify grease interceptors were in place, but no actual inspections were performed on these devices due to the design of the devices.

There were three establishments that did not respond to the request for on-site inspections.

As other establishments are built or identified as needing to have a grease trap/interceptor, the establishment will be added to the programs records.

An adequate response related to copies of inspection records has been received, although multiple requests are necessary at times. Staff received copies of maintenance records from 20 of the businesses identified.

There are plans to change the program in 2019. Staff is proposing that an annual grease trap/interceptor license will be issued to each establishment. An annual inspection and copies of maintenance records for the previous year will be required before the licenses can be issued/renewed. There will also be fines for operating without a license and not maintaining the devices in proper working conditions.

YTD - GREASE TRAP/ RECEPTOR SURVEY	
12/31/2018	
NUMBER OF BUSINESS CONTACTED	54
INSPECTION REQUEST OR RECORD REQUEST LETTERS MAILED OUT	108
NUMBER OF BUSINESS THAT REQUIRE TRAPS/INTERCEPTORS	53
BUSINESS EXEMPT FOR GREASE EQUIPMENT	1
NEW QUIPMENT INSTALLS	2
BUSINESSES NOT YET INSPECTED	3
NUMBER OF SITE INSPECTIONS OF GREASE TRAPS	27
NUMBER OF MAINTENACE RECORDS RECEIVED	20

Colette Kiszka

From: Mike McDonald
Sent: Friday, May 18, 2018 9:12 AM
To: Colette Kiszka
Subject: FW: EAGLES
Attachments: EAGLES 1.jpg; EAGLES 2.jpg; EAGLES 3.jpg; EAGLES.jpg

Please add to our KDHE report file
Mike

From: Mike Hooper
Sent: Thursday, March 15, 2018 8:43 AM
To: Steve Grant; Brian Bailey
Cc: Cassidy Williams; Mike McDonald
Subject: FW: EAGLES

Steve/Brian,

We just realized your contractor has started working on the Eagles Ballfield and the project does not have an "LDP" or any erosion control measures in place. Please get with Cassidy to let her know what work is underway for your permit. Please have your contractor or your park's employees install the required/necessary erosion control measures by close of business today. If you have any questions, give me a call.

Mike

From: Hal Burdette
Sent: Wednesday, March 14, 2018 4:29 PM
To: Mike Hooper
Subject: FW: EAGLES

Mike,

Here are the pictures of Eagles that Bill took this afternoon.

Hal

From: Bill Corbet Jr.
Sent: Wednesday, March 14, 2018 4:27 PM
To: Hal Burdette
Subject: EAGLES

Here are the pictures

Bill Corbet
Inspector
City of Leavenworth
200 N. 5th St.
Leavenworth KS, 66048
[*bcorbet@firstcity.org*](mailto:bcorbet@firstcity.org)

Eagles Ballfield



Colette Kiszka

From: Cassidy Williams
Sent: Thursday, November 01, 2018 11:34 AM
To: Chuck Staples; Colette Kiszka
Cc: Charity Frey
Subject: RE: WATER DISCHARGE (DUCKS CARPET CLEANING)

Is there a file you guys can save this to?

*Cassidy Williams
Inspection Clerk II
City of Leavenworth
100 N. 5Th St.
Leavenworth Ks, 66048
cwilliams@firstcity.org
913-684-0378*

From: Justin Stewart
Sent: Monday, October 29, 2018 4:42 PM
To: Cassidy Williams <cwilliams@firstcity.org>; Chuck Staples <cstaples@firstcity.org>
Cc: Mike McDonald <MMcDonald@firstcity.org>; Hal Burdette <HBurdette@firstcity.org>; Michael Stephan <mstephan@firstcity.org>; Mike Hooper <mhooper@firstcity.org>
Subject: RE: WATER DISCHARGE (DUCKS CARPET CLEANING)

I spoke with Robert (owner) this afternoon. He stated that he was dumping on his property when his drive was not blocked by the neighbor.
I told him to never dump in the right of way or on the street and all flows should be kept on his property. He might be in contact to confirm the ordinances for discharging on his property.
He said the EPA has changed the category of his chemicals so they were now no worse than laundry soap. He also stated that he was told he could discharge in the street if he was more than 75 feet from an storm inlet.
I told him to never dump in the street or the right or way again.
They are rumored to be moving locations soon.

Justin Stewart
Civil Engineering Tech. II
City of Leavenworth
100 North 5th Street
Leavenworth, KS. 66048
913-684-0368
913-684-0375
913-682-1521 (fax)
jstewart@firstcity.org

From: Cassidy Williams
Sent: Monday, October 29, 2018 4:00 PM
To: Chuck Staples <cstaples@firstcity.org>
: Justin Stewart <JStewart@firstcity.org>
Subject: RE: WATER DISCHARGE (DUCKS CARPET CLEANING)

They are normally not there. You have to call to get ahold of anybody. At least that's how it used to be. 913-549-6558

Cassidy Williams
Inspection Clerk II
City of Leavenworth
100 N. 5Th St.
Leavenworth Ks, 66048
cwilliams@firstcity.org
913-684-0378

From: Chuck Staples
Sent: Monday, October 29, 2018 3:39 PM
: Cassidy Williams <cwilliams@firstcity.org>
Subject: RE: WATER DISCHARGE (DUCKS CARPET CLEANING)

Drove by and it looks like they are closed today.

From: Cassidy Williams
Sent: Monday, October 29, 2018 1:07 PM
To: Mike Hooper <mhooper@firstcity.org>; Mike McDonald <MMcDonald@firstcity.org>
Cc: Chuck Staples <cstaples@firstcity.org>; Colette Kiszka <ckiszka@firstcity.org>
Subject: WATER DISCHARGE (DUCKS CARPET CLEANING)

It has been reported that Duck's Carpet Cleaning is discharging water into the street. Not sure if this is just plain dirty water or if there are chemicals involved. Caller stated it smells and it seems to be happening at the end the day. Callers address is 619 Dakota. Phone number is 913-547-1460.

Cassidy Williams
Inspection Clerk II
City of Leavenworth
100 N. 5Th St.
Leavenworth Ks, 66048
cwilliams@firstcity.org
913-684-0378

BMP 3

Mike McDonald

From: Patrick Kitchens
Sent: Monday, February 11, 2019 11:32 AM
To: Mike McDonald
Cc: Mike Hooper; Dan Nicodemus
Subject: RE: Dead Animals in the Street

POLICE / ANIMAL CONTROL.

Mike,

We do pick up dead animals when someone calls and requests or if we find it. We have a contract with a company that will incinerate them. We don't track that number.

Pat

From: Mike McDonald <MMcDonald@firstcity.org>
Sent: Monday, February 11, 2019 9:08 AM
To: Patrick Kitchens <pkitchens@firstcity.org>
Cc: Mike Hooper <mhooper@firstcity.org>; Dan Nicodemus <dnicodemus@firstcity.org>
Subject: Dead Animals in the Street

Pat – KDHE Annual Report for Stormwater is asking if we (city) have a program to pick up dead animals in the street, yards, etc.

Can you tell me anything about what PD does with this – and are there any records kept as to numbers?

Mike

Michael G. McDonald, PE

Director of Public Works
City of Leavenworth
100 N Fifth Street
Leavenworth, KS 66048
mmcdonald@firstcity.org
913-684-0375

Mike McDonald

From: Steve King
Sent: Monday, February 11, 2019 9:50 AM
To: Becky Beaver; Mike McDonald; Curtis Marks
Cc: Mike Hooper
Subject: RE: Dead Animals in the Street

Solid Waste currently calls Animal Control as well for anything not in the trash. We don't keep numbers.

From: Becky Beaver <BBeaver@firstcity.org>
Sent: Monday, February 11, 2019 9:24 AM
To: Mike McDonald <MMcDonald@firstcity.org>; Curtis Marks <camarks@firstcity.org>
Cc: Steve King <sking@firstcity.org>; Mike Hooper <mhooper@firstcity.org>
Subject: RE: Dead Animals in the Street

Hello,

If Streets/Storm Water comes across a dead animal either in the street or in a storm drain, we call Animal Control to come remove it.

Thanks.

Becky Beaver
Street Foreman
City of Leavenworth
790 Thornton St.
Leavenworth, KS. 66048
Office: (913) 758-6615
Cell: (913) 306-2853
bbeaver@firstcity.org

From: Mike McDonald <MMcDonald@firstcity.org>
Sent: Monday, February 11, 2019 9:09 AM
To: Curtis Marks <camarks@firstcity.org>
Cc: Becky Beaver <BBeaver@firstcity.org>; Steve King <sking@firstcity.org>; Mike Hooper <mhooper@firstcity.org>
Subject: Dead Animals in the Street

Curtis/Steve/Becky -

KDHE Annual Report for Stormwater is asking if we (city) have a program to pick up dead animals in the street, yards, etc.

Can you tell me anything about what we might be doing with this – and are there any records kept as to numbers?

Mike

Michael G. McDonald, PE

Director of Public Works

City of Leavenworth

100 N Fifth Street

Leavenworth, KS 66048

mmcdonald@firstcity.org

913-684-0375

Appendix D (Continued)

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report – Section E) (BMP Number 4)

BMP 4 – Construction Site Stormwater Runoff Control

Examples of:

- Internal Communication
- Land Disturbance Permit Applications
- Erosion and Sediment Control Inspection Report Forms
- Inspection of Runoff Control
- Letter Referencing Erosion Control

City of Leavenworth

LAND DISTURBANCE PERMIT APPLICATION

(Fill Permits Require An Additional Application)

City of Leavenworth Public Works

100 N. 5th Street

Leavenworth, KS. 66048

913 684 0375

Date 10/11/2018

Reviewed By: _____

Applicant Name: Linaweaver Construction, INC. Phone: 913-351-3474

Address: 719 E Gilman Rd, Lansing, KS Zip Code: 66043

Email: John@linaweaver.com Fax: 913-351-2749

Project Type

Single Family Home

Utility Extension

Commercial/Mutli-family

General Grading/Filling

Single Family Subdivision

Public Improvement Project

Building Addition

Other: explain Below

Project Location

Property Address: _____

Name of Project or Subdivision: 16th Terrace and Thornton

Owner of Record: City of Leavenworth Phone number: _____

Proposed Land Use: Detention Storage

Total Site Area: Aprox. 1/2 Acres/or _____ Sq. Feet

Total Area of Land

Disturbance: Aprox. 1/2 Acres/or _____ Sq. Feet

Describe the Proposed work: Cuts/fills, detention pond, concrete structure, pipe restoration

Revised: September 10, 2015



City of Leavenworth

100 N. 5th St.
Leavenworth, KS 66048
(913)684-0378

PERMIT NUMBER
3866
Issue Date: 01/09/2018

Permit Type: LAND DISTURBANCE PERMIT

Parcel Number	Street Address
0772503101005000	116 OTTAWA STREET
Zone Code	Jurisdiction
R16	LEAVENWORTH

Owner Information	Applicant Information
Name: ALEXANDER, JUSTINE Phone:	Name: DEVELOPMENT, COMMUNITY Phone: 913-680-2627

Contractor Information	
Name: DEVELOPMENT, COMMUNITY Address: 100 N 5TH ST Phone:	License Number: License Exp. Date: Insurance Exp. Date:

Building Information	
Proposed Use: Construction Type: Occupancy Group: Estimated Cost of Construction: \$	Finished Sq. Ft: Unfinished Sq. Ft: Garage Sq. Ft: Number of Stories:

Project Description: LAND DISTURBANCE PERMIT

Scope of Work:

DEMO SINGLE FAMILY HOME
CITY INITIATED DEMO

I, the undersigned, hereby agree to comply with all applicable laws regulating the work. I have also received a copy of this document and understand that it is my responsibility to inform this office of any change of contractor by completing and submitting a change of contractor form if necessary. Separate permits are required for electrical, plumbing, heating, ventilating or air conditioning. It is the responsibility of the owner/applicant to identify and abide by all easements, covenants and other regulations related to land use that may be affected by the construction work for which this permit is issued.

Signature of Owner/Contractor

Signature of Approving Official

Date: 01/09/2018

**ANY PERMIT ISSUED EXPIRES SIX (6) MONTHS AFTER ISSUANCE IF NO INSPECTIONS HAVE BEEN MADE.
ANY PERMIT ISSUED SHALL EXPIRE SIX (6) MONTHS AFTER ISSUANCE IF THE WORK IS DISCONTINUED.**

Application Number	3372	TOTAL FEES:	\$
--------------------	------	-------------	----

RECIPIENT COPY

City of Leavenworth

LAND DISTURBANCE PERMIT APPLICATION

(Fill Permits Require An Additional Application)

City of Leavenworth Public Works

100 N. 5th Street

Leavenworth, KS. 66048

913 684 0378

Date

1/4/18

Applicant Name: City of Leavenworth

Phone: 680-2628

Contact: Mary

Dwyer

Department of

Planning and

Community

Development

Complete Mailing Address: _____

Email: mdwyer@firstcity.org

Project Type

Single Family Home

Utility Extension

Commercial/Mutli-family

General Grading/Filling

Single Family Subdivision

Public Improvement Project

Building Addition

Other: explain Below

City initiated demo- garage only- Demo Permit number 2631

Project Location

Property Address: 116 Ottawa

Name of Project or Subdivision: _____

Owner of Record : Justine Alexander

Phone number: _____

Work Schedule

Start Date: TBD

End Date: _____

Total Site Area: _____ Acres/or _____ Sq. Feet

Total Area of Land

Disturbance: _____ Acres/or _____ Sq. Feet

City of Leavenworth

LAND DISTURBANCE PERMIT APPLICATION

Parties Responsible for Maintaining Erosion Control

Check one: Contractor Or Property Owner
City of Leavenworth
Contact: Mary Dwyer

Name: _____

Mailing Address: _____

Business Phone : 680-2628 Cell Phone 913-306-1775

Email: mdwyer@firstcity.org

General Contractor contact information

Company Name: Madget Demolition
Mailing Address: 2425 6th St., St. Joseph, MO 64501

Business Phone: 816-232-6210 Cell Phone: _____

Email: madgetdemolition@att.net

Does work include any construction activity in the FEMA regulated floodplain?

Yes No

Note; Additional permits for work in floodplain are required. Attach any additional information to this permit application.

City of Leavenworth

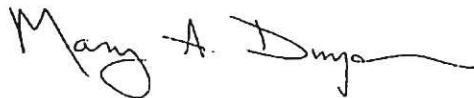
LAND DISTURBANCE PERMIT APPLICATION

Applicant acknowledges they have provided the following documents and have been advised of inspection requirements. (Initial next to each item)

- md Completed Land Disturbance Application
- md Attached site specific Erosion Control Plan
- Attached site specific grading plan
- Schedule for duration of land disturbance
- This is a single family building project or home addition and I as applicant will follow the attached "Single Family Lot Erosion and Sediment Control Plan"

- md The applicant by submitting this application does agree to perform all necessary work to include bi-weekly inspections and inspections after each ½" rain event (24 hour). The applicant will supply the City of Leavenworth with all inspection records upon request, and copies must be provided in order to obtain a Compliance Certificate.

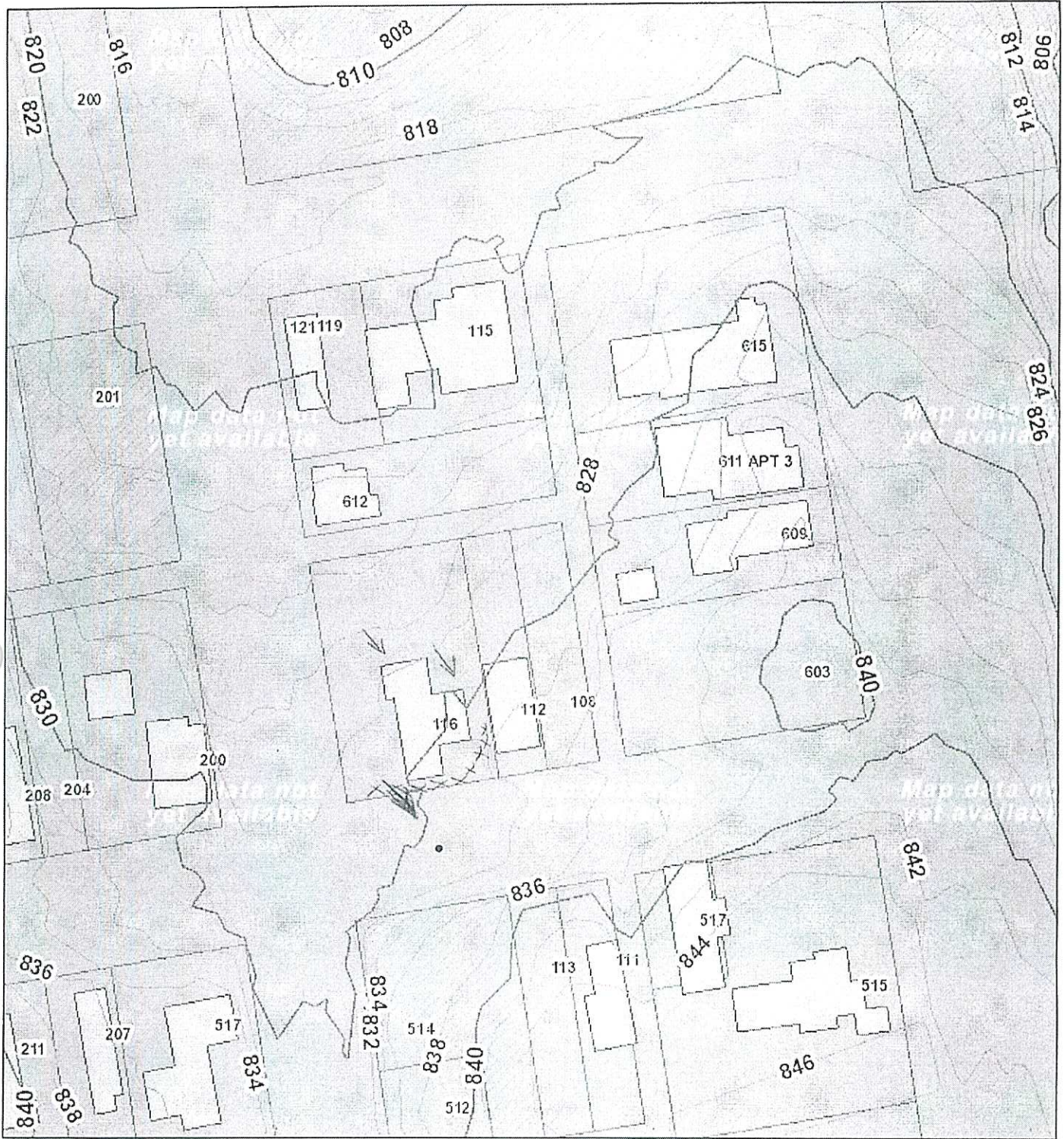
The applicant fully understands that the responsible party shall comply with this permit and repair all substandard erosion control within a 24 hour period after notification of failure to comply with the plan. Failure to comply within the allotted time frame is a violation and shall be reason for the City of Leavenworth to issue a **Stop Order** on all work, repair the damaged erosion control, and clean all surrounding grounds. The contractor/owner shall be held responsible for all expense incurred to remedy the violation and may be charged with a Nuisance Complaint in Municipal Court. Contractors will be required to submit copies of BMP Inspections prior to a certificates of occupancy being issued.



Applicant Signature: _____







Owner Signature: _____

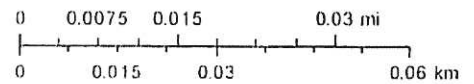
116 Ottawa



1/4/2018 3:48:32 PM

1:1,128

-  Index
-  Intermediate
-  Address (Points)
-  Buildings
-  Parcels
-  Parcels (City Owned)



LV GIS Dept 05/23/2016
 Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the
 GIS user community

116 OTTAWA
APP #3372
1/23/18

MAATSU

Cassidy Williams

From: Cassidy Williams
Sent: Friday, January 26, 2018 9:16 AM
To: Mary Dwyer
Cc: Mark Kramer
Subject: FW: 116 OTTAWA
Attachments: 20180123_101013.jpg

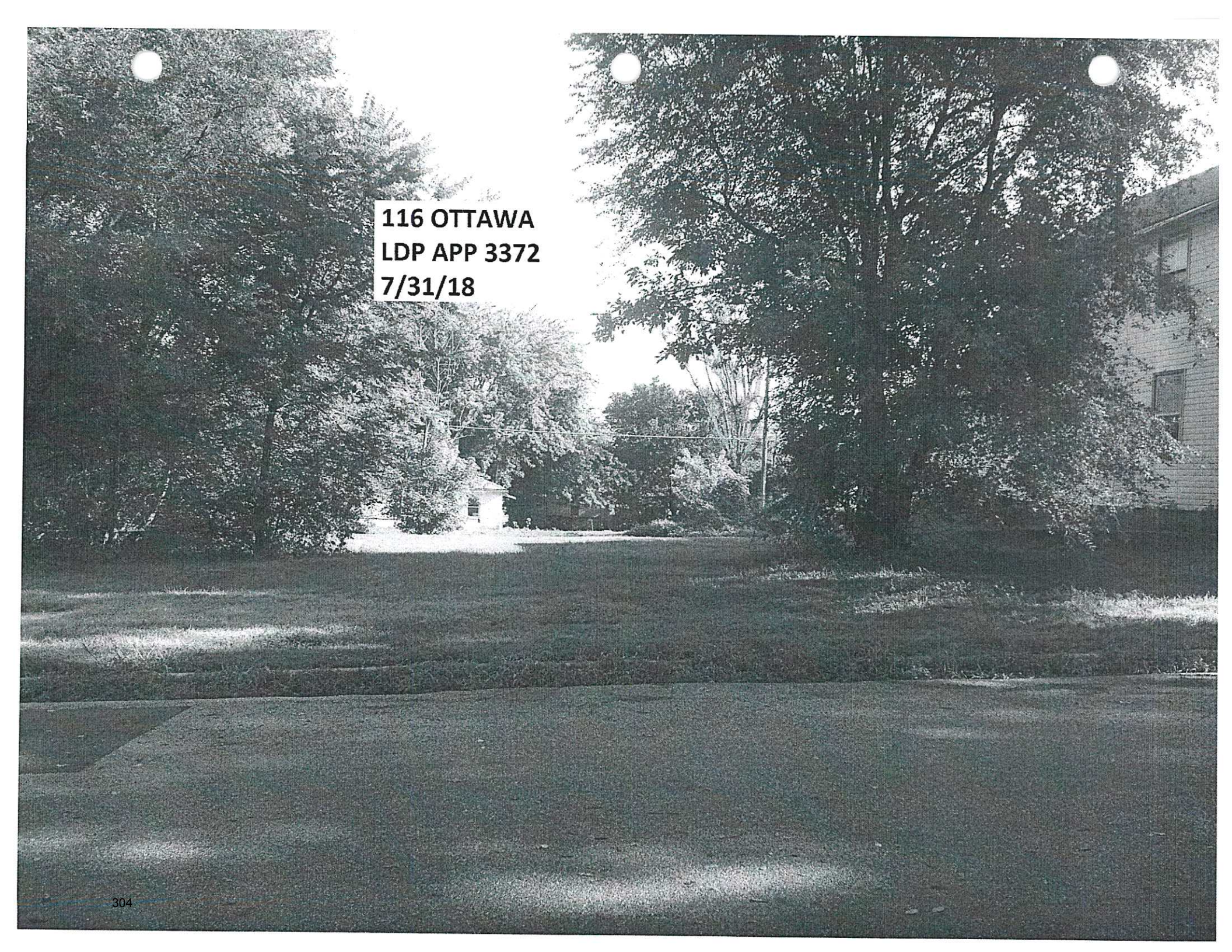
Please note the deficiencies mentioned below. You will need to make corrections and notify the inspection Department so a follow up inspection can be completed.

*Cassidy Williams
Clerk/Receptionist
City of Leavenworth
100 N. 5Th St.
Leavenworth Ks, 66048
cwilliams@firstcity.org
913-684-0378*

From: Mark Kramer
Sent: Tuesday, January 23, 2018 11:20 AM
To: Cassidy Williams <cwilliams@firstcity.org>
Subject: 116 OTTAWA

EROSION CONTROL - INITIAL INSPECTION – DISAPPROVED:

1. COMPLETE GRADING; REMOVE DEBRIS & TRASH
2. INSTALL EROSION CONTROL BARRIERS
3. NO RECORD OF SEWER CAP PLUMBING PERMIT OR INSPECTION



**116 OTTAWA
LDP APP 3372
7/31/18**

PROJECT INSPECTION LOG FORM

Location 116 Ottawa **Project:** Demo Home **APP#** 3372 **Issued:** 1-9-18
Owner: City Demo
Contractor: SAME

Day	YEAR: 20 <u>18</u>											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1												
2												
3												
4				<i>ML</i>								
5				<i>ML</i>								
6												
7												
8												
9												
10												
11												
12												
13		<i>ML</i>										
14		<i>ML</i>										
15												
16			<i>ML</i>									
17												
18												
19												
20												
21												
22												
23												
24												
25												
26				<i>ML</i>								
27												
28												
29	<i>ML</i>											
30	<i>ML</i>	<i>ML</i>										
31							<i>ML</i>					

Job Address: 116 Ottawa

Job description Demo Home

Initial Inspection of Erosion and Sediment Control

App# 3372 Owner/Contractor City Demo

Date issued 1-9-18 Inspection date 1/30/18 Inspector Mark K.

A. Project Overview

- How Many Acres Total Does the Project Disturb? <1
- Project Start Date: _____ Project End Date: _____
- Phase I start date? _____

B. Paperwork

- *Does the project have a Land Disturbance Permit? Yes No N/A
- *Is the SWPPP Notebook onsite? Yes No N/A
- * Is the Inspection log on site? Yes No N/A


C. Site Preparation

- *Has the contractor installed temporary construction entrance(s) and are the vehicles using it? Yes No N/A
- *Is there a place for concrete wash-out, is it clearly marked and do concrete trucks appear to be using it? Yes No N/A
- *Is the site largely free of construction trash? (cups, lunch sacks, material packaging, etc.) Yes No N/A
- *Have perimeter sediment controls been installed? Yes No N/A
- *Have pre-construction controls been installed per the plan? Yes No N/A
- *Have easily recognizable indications of the construction limits been installed? (fencing, staking, physical barriers) Yes No N/A

* Must be "yes" or N/A in order for inspection to be "satisfactory".

D. Approval

City staff initial for approval:

 Land disturbance work **will** proceed, as this site has met all the initial standard requirements of the City of Leavenworth's General Guidelines for Stormwater and Drainage measures.

_____ Land disturbance work **will not** proceed as this site has not met all the initial standard requirements of the City of Leavenworth's General Guidelines for Stormwater and Drainage measures. The deficiencies below must be corrected in order to have a satisfactory inspection:

1. _____
2. _____
3. _____

Erosion and Sediment Control Inspection Report Form

Project Name and Location *116 OTTAWA LPP APP - 3372*

Weather: *50° cel*

Rain in last 24 hrs (inches): *< 1/2"*

Owner / Permittee:
CITY DEMO / ALEXANDER STS

A. Current Construction / Active Areas:
DEMO HOUSE

Pollution Control Measures (BMP) Checklist:

- Inlet Barrier (ie: gravel bags)
- Sediment Barriers (ie: ditch checks)
- Erosion Blankets, Hydromulch / Seed, etc
- Stabilized Construction Entrance
- Stream Crossings
- Seed / Sod Areas
- Sediment Basins & Discharge Locations
- Borrow Areas
- General Site Condition (trash, etc)

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):

BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered

C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

4/26/18
Date of Inspection

[Signature]
Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly**
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 116 OTTAWA LDP APP. 3372

Weather: 100° ECK

Rain in last 24 hrs (inches): 0"

Owner / Permittee: CITY DEMO.

A. Current Construction / Active Areas:
DEMO HOUSE

Pollution Control Measures (BMP) Checklist:

- Inlet Barrier (ie: gravel bags)
- Sediment Barriers (ie: ditch checks)
- Erosion Blankets, Hydromulch / Seed, etc
- Stabilized Construction Entrance
- Stream Crossings
- Seed / Sod Areas
- Sediment Basins & Discharge Locations
- Borrow Areas
- General Site Condition (trash, etc)

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):

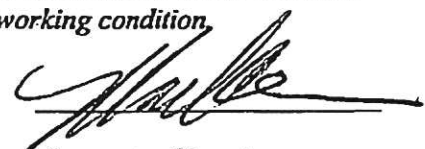
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered

C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

4/5/18
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 116 OTTAWA LDP APP-3372

Weather: 30° CLR

Rain in last 24 hrs (inches): 0"

Owner / Permittee:
City Demo

A. Current Construction / Active Areas:
DEMO OF HOUSE

Pollution Control Measures (BMP) Checklist:

- Inlet Barrier (ie: gravel bags)
- Sediment Barriers (ie: ditch checks)
- Erosion Blankets, Hydromulch / Seed, etc
- Stabilized Construction Entrance
- Stream Crossings
- Seed / Sod Areas
- Sediment Basins & Discharge Locations
- Borrow Areas
- General Site Condition (trash, etc)

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):

BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered


C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

--	--

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

3/30/18
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly**
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 116 OTTAWA LPP APP 3372

Weather: 40° CLOUDY MISTY

Rain in last 24 hrs (inches): 2 1/2"

Owner / Permittee: CITY DEMO

A. Current Construction / Active Areas:
DEMO HOUSE

Pollution Control Measures (BMP) Checklist:

- Inlet Barrier (ie: gravel bags)
- Sediment Barriers (ie: ditch checks)
- Erosion Blankets, Hydromulch / Seed, etc
- Stabilized Construction Entrance
- Stream Crossings
- Seed / Sod Areas
- Sediment Basins & Discharge Locations
- Borrow Areas
- General Site Condition (trash, etc)

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):


BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered

C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

3/16/17
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 116 OTTAWA LDP APP# 3372	
Weather: 35° CLR	Pollution Control Measures (BMP) Checklist: <input checked="" type="checkbox"/> Inlet Barrier (ie: gravel bags) <input checked="" type="checkbox"/> Sediment Barriers (ie: ditch checks) <input checked="" type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input checked="" type="checkbox"/> Stabilized Construction Entrance <input checked="" type="checkbox"/> Stream Crossings <input checked="" type="checkbox"/> Seed / Sod Areas <input checked="" type="checkbox"/> Sediment Basins & Discharge Locations <input checked="" type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)
Rain in last 24 hrs (inches): 0"	
Owner / Permittee: CITY DEMO HSE	
A. Current Construction / Active Areas: CITY DEMO	

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):


BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered

C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

Date of Inspection
12/13/18


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Address 116 OTTAWA

Final Inspection of Erosion and Sediment Control

LDP Number 3377 Description DEMO. Owner/Contractor ALEXANDER
Date 7/31/18 Time 1100 City Inspector MANU KRAMER

Project Overview

- How Many Acres Total Does the Project Disturb? 1
- Project Start Date 1/9/18 Project End Date 7/31/18

Paperwork

- Is the SWPPP Notebook onsite? Yes No N/A
- Has a copy of the SWPPP been given to City staff Yes No N/A

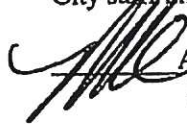
Final Site Preparation*

- Has the concrete wash-out area been cleaned? Yes No N/A
- Is the site free of construction trash? Yes No N/A
(cups, lunch sacks, material packaging, wood debris, etc.)
- Have perimeter sediment controls been taken down? Yes No N/A
- Have indications of the construction limits been taken down? (fencing, staking, physical barriers) Yes No N/A
- Has all the dirt on the site been covered? Yes No N/A
- Have appropriate grasses/sod/trees been planted? Yes No N/A
- Have the plants accepted? Yes No N/A
- Have gutters and streets been cleaned of soil/trash? Yes No N/A
- Have all erosion controls been removed? Yes No N/A
- Has all erosion control has been removed from City Right of way Yes No N/A

* Must be "yes" or N/A in order for inspection to be "satisfactory".

Approval

City staff initial for approval:



A Compliance Certificate will be submitted, as this site has met all the requirements of the City of Leavenworth's General Guidelines for Stormwater and Drainage standards.

A Compliance Certificate will not be submitted until all above requirements of the City of Leavenworth's General Guidelines for Stormwater and Drainage standards have been met. The items below must be completed in order to have a satisfactory inspection:

1. _____
2. _____
3. _____
4. _____



CITY OF LEAVENWORTH, KANSAS
BUILDING INSPECTION DEPARTMENT
PHONE: (913) 684-0378

Address 116 OTTAWA

Contractor _____ Phone # _____

Application # 3372 Inspection ID # 24833

Approved 2031 Disapproved 3387 **BUILDING**
 Footing Foundation
 Rough In Sheetrock
 Other Final DEMO HOUSE

Approved _____ Disapproved _____ **PLUMBING**
 Sewer Gas
 Rough In Under Slab
 Final
 Other _____

Approved _____ Disapproved _____ **HVAC**
 Rough In Change Out
 Fireplace Wood Stove
 Final
 Other _____

Approved _____ Disapproved _____ **ELECTRICAL**
 Rough In Under Slab
 Service _____
 Final
 Other _____

Comments:

REMOVE SILL FLEED

FINAL P.I.C ATTACHED TO FILE

31
7/18/18
 Date
WMS

[Signature]
 Inspector

Colette Kiszka

From: Hal Burdette
Sent: Tuesday, February 12, 2019 4:57 PM
To: Colette Kiszka
Subject: 2018 LDP's

Colette,

We issued 80 Land Disturbance Permits in 2018. This number includes permits for small projects such as garage/shed construction and demolition up projects such as the West Glen subdivision development.

Hal Burdette
Chief Building Inspector
City of Leavenworth
100 N. 5th St.
Leavenworth, KS 66048
913-684-0378

City of Leavenworth

LAND DISTURBANCE PERMIT APPLICATION

Parties Responsible for Maintaining Erosion Control

Check one: Contractor Or Property Owner

Name: _____

Address: _____

Business Phone : _____ Cell Phone _____

Email: _____

Contractor:

Company Name: Linaweaver Construction, INC.

Address: _____

Business Phone: _____ Cell Phone: _____

Email: _____

Engineer:

Company Name: Water Resources Solution

Responsible Engineer: Matt Harper

Address: 13928 W. 76th Circle
Lenexa, KS Zip Code: 66216

Business Phone: 913-302-1030 Cell Phone: _____

Email: MHarper@wrs-rc.com

Erosion Control:

Company Name: Linaweaver Construction, INC.

Address: _____

Business Phone: _____ Cell Phone: _____

Email: _____

Revised: September 10, 2015

City of Leavenworth

LAND DISTURBANCE PERMIT APPLICATION

Does work include any construction activity in the FEMA regulated floodplain?

Yes No

Note; Additional permits for work in floodplain are required. Attach any additional information to this permit application.

LAND DISTURBANCE APPLICANT CHECK LIST

Completed Land Disturbance Application

In Plans Attached site specific Stormwater Pollution Prevention Plan (SWPP Plan)

In Plans Attached site specific Erosion Control Plan

In Plans Attached site specific grading plan

Pending Attached Schedule for duration of land disturbance

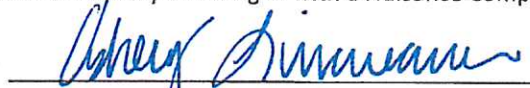
N/A Attached NOI if required (over 1 acre-SWPP required)

N/A This is a single family building project or home addition and I as applicant will follow the attached "Single Family Lot Erosion and Sediment Control Plan"

Yes The applicant by submitting this application does agree to perform all necessary work to include bi-weekly inspections and inspections after each ½" rain event (24 hour). The applicant will supply the City of Leavenworth with all inspection records upon request, and copies must be provided in order to obtain a Compliance Certificate.

The applicant fully understands that the responsible party shall comply with this permit and repair all substandard erosion control within a 24 hour period after notification of failure to comply with the plan. Failure to comply within the allotted time frame is a violation and shall be reason for the City of Leavenworth to issue a **Stop Order** on all work, repair the damaged erosion control, and clean all surrounding grounds. The contractor/owner shall be held responsible for all expense incurred to remedy the violation and may be charged with a Nuisance Complaint in Municipal Court.

Applicant Signature: _____



Owner Signature: _____




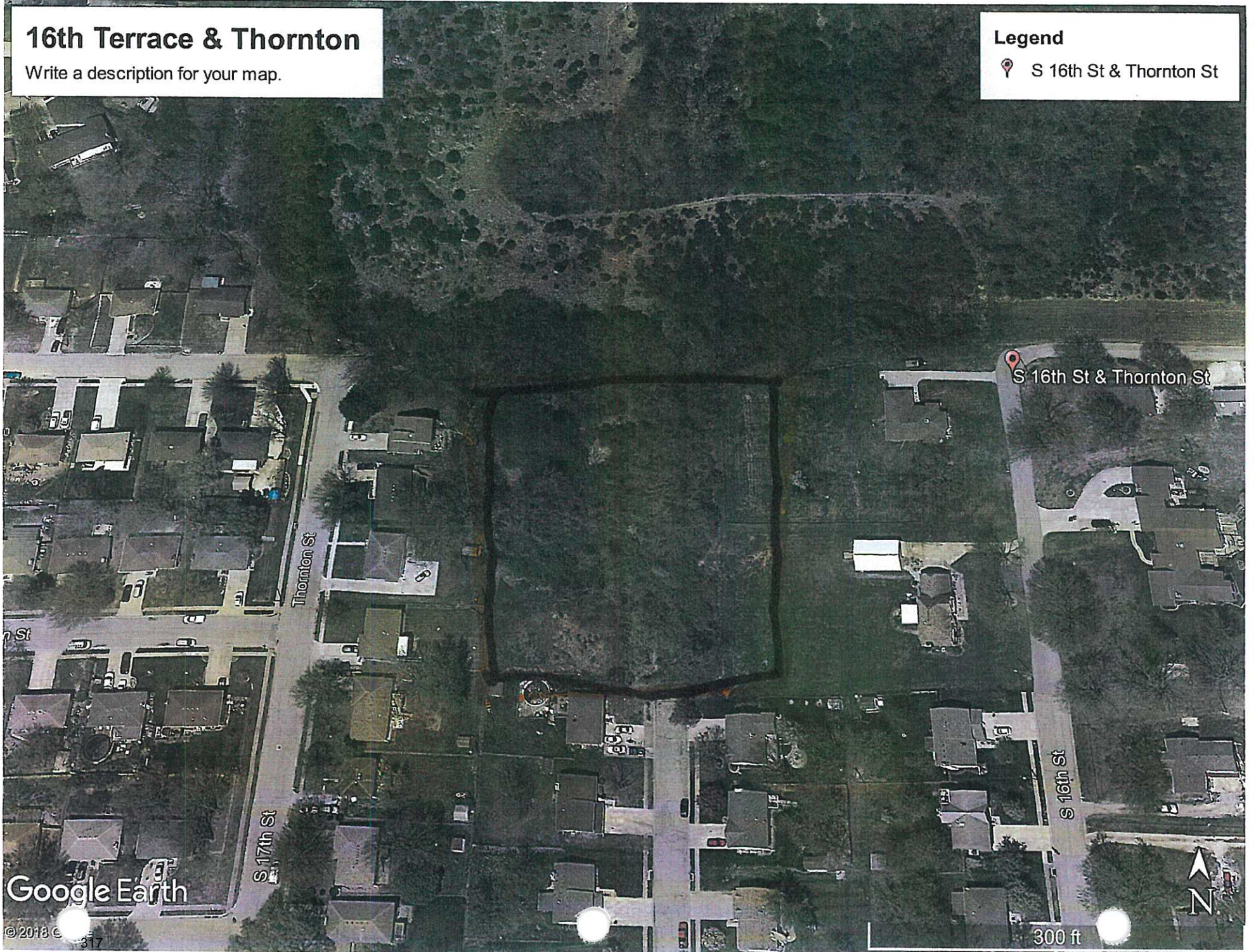
Revised: September 10, 2015

16th Terrace & Thornton

Write a description for your map.

Legend

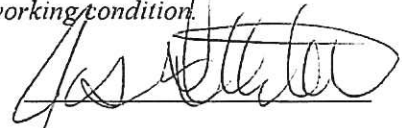
 S 16th St & Thornton St



Erosion and Sediment Control Inspection Report Form		
Project Name and Location 16 th TERR - VILAS		
Weather: SNOW		Pollution Control Measures (BMP) Checklist: <input checked="" type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input checked="" type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)
Rain in last 24 hrs (inches): 1.02		
Owner / Permittee: LINAWEAVER		
A. Current Construction / Active Areas: RETENTION POND		
B. Problem Areas / Special Observations (*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

DEC 3, 2014
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
- Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

16th Terrace and Thornton Phase 1 Detention Storage
SITE INSPECTION FORMS/LOGS
(attach all site inspection forms, daily activity logs, etc.)

Maintenance Inspection Report

Date: October 29, 2018

Project Name/Location: 16th Terrace and Thornton Phase 1 Detention

Owner: Leavenworth, Kansas

Weather Conditions: clear, 70 degrees.

Rain in last 24 hours (inches): 0.0" 0.07 last week

Inspector Name (print) and Signature: KEN CHAPLIN Stage of

Construction:

- | | |
|---|---|
| <input type="checkbox"/> Pre-construction Meeting | <input type="checkbox"/> Temporary Stabilization |
| <input type="checkbox"/> Installation of Perimeter ESC Measures | <input type="checkbox"/> Finish Grading |
| <input type="checkbox"/> Clearing and Grubbing | <input checked="" type="checkbox"/> Public Improvements |
| <input type="checkbox"/> Rough Grading | <input type="checkbox"/> Building Construction |

Inspection Checklist:

BMP Condition	Yes	No	N/A	If "no", list locations needing BMPs and/or maintenance.
Storm Sewer Inlet Barriers (sand bags, gutter buddies, straw wattles)				
Are storm sewer inlet barriers properly placed?	X			
Are storm sewer inlet barriers in good condition?	X			
Are barriers controlling flows into the inlet?	X			
Is sediment height less than 1/2 the barrier height?	X			
Are all storm water inlets protected?	X			
Are storm sewer boxes and/or pipes free of sediment?	X			
Perimeter Controls (diversions, silt fence, straw wattles, mulch berms, etc.)				

Is offsite storm water drainage diverted?			X	
Are perimeter controls up and in good condition?	X			

BMP Condition	Yes	No	N/A	If "no", list locations needing BMPs and/or maintenance.
Perimeter Controls (continued)				
Have all offsite properties and drainages been protected by perimeter controls?	X			
Stabilized Construction Entrances				
Is there adequate clean gravel present?			X	
Is soil and gravel staying onsite?	X			
Are contractors using the stabilized construction entrance?	X			
Stream Crossings				
Are temporary crossings controlling erosion?	X			construction entrance installed 11.20
Are culverts adequately sized?			X	
Temporary Stabilization				
Are seeded areas properly established?			X	
Is mulch crimped in and holding seed in place?			X	
Are erosion control blankets and mats in good condition?			X	
Are soil piles seeded, mulched and bordered down slope by sediment barriers?	X			mulch berms installed 11. 20.18
Sediment Basin				
Is the basin less than 1/2 full of sediment from original design?			X	
Are side slopes in good condition?			X	
Is the basin containing			X	

storm water flows?			X	
Is the outfall in good condition?			X	

BMP Condition	Yes	No	N/A	If "no", list locations needing BMPs and/or maintenance.
Swales and Drainage Ways				
Are ditch bottoms protected from undercutting and erosion?			X	
Are ditch checks properly maintained?			X	
Are outfalls properly stabilized?			X	
Slope Protection				
Are all slopes protected with vegetative cover, terraces or erosion control blankets?			X	
General Site Conditions				
Is trash and construction debris properly contained onsite?	X			
Are porta-potties properly located and maintained?	X			
Are all vehicles properly maintained to avoid leakage?	X			
Are all chemicals properly containerized and stored?			X	
Are concrete washout areas established and maintained?			X	

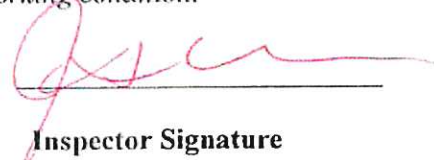
Corrective Measures: For all areas needing BMPs or maintenance, describe corrective measures and implementation timeframe?

Erosion and Sediment Control Inspection Report Form

Project Name and Location 2018 PMP 867		
Weather: <u>Clear</u>	Pollution Control Measures (BMP) Checklist: <input checked="" type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)	
Rain in last 24 hrs (inches): <u>0</u>		
Owner / Permittee: <u>McANNANY</u>		
A. Current Construction / Active Areas: <u>20th STREET @</u> <u>EISENHOWER</u>		
B. Problem Areas / Special Observations(*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. <u>PAVING OPERATION</u>		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

9-12-18
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 2018 PMP 867		
Weather: RAIN	Pollution Control Measures (BMP) Checklist: <input checked="" type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)	
Rain in last 24 hrs (inches): 1.10		
Owner / Permittee: McANNANY		
A. Current Construction / Active Areas: 6th + Cherokee		
B. Problem Areas / Special Observations (*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
INLET PROTECTION	inlets 6th + Cherokee	water going around inlets
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. 20th STREET		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

10-9-18
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
 • Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location RETENTION BASINS 16th TERT

Weather: Clear

Rain in last 24 hrs (inches): —

Owner / Permittee: Lina Weaver

A. Current Construction / Active Areas:
BASIN AREA

Pollution Control Measures (BMP) Checklist:

- Inlet Barrier (i.e.: gravel bags)
- Sediment Barriers (i.e.: ditch checks)
- Erosion Blankets, Hydromulch / Seed, etc
- Stabilized Construction Entrance
- Stream Crossings
- Seed / Sod Areas
- Sediment Basins & Discharge Locations
- Borrow Areas
- General Site Condition (trash, etc)

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):

BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered

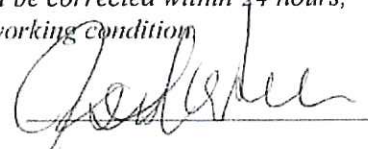
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

None

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

NOV, 26 2018
Date of Inspection


Inspector Signature

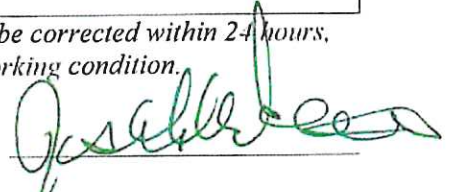
- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
- Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 2018 PMP 867		
Weather: RAIN	Pollution Control Measures (BMP) Checklist:	
Rain in last 24 hrs (inches): .51	<input checked="" type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)	
Owner / Permittee: MCANNAY		
A. Current Construction / Active Areas: 20th + New LAWRENCE RD		
B. Problem Areas / Special Observations (*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. 20th + TONGIENOXIE		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

8-14-18
Date of
Inspection


Inspector Signature

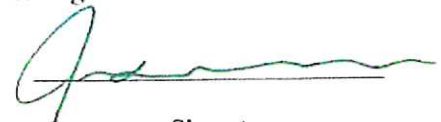
- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 2 nd + Choctaw 855		
Weather: clear	Pollution Control Measures (BMP) Checklist:	
Rain in last 24 hrs (inches): 0	<input checked="" type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)	
Owner / Permittee: BAKER CONST.		
A. Current Construction / Active Areas:		
2 nd + Choctaw		
B. Problem Areas / Special Observations (*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.		
2 nd + Cherokee		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

6-11-18
 Date of
 Inspection

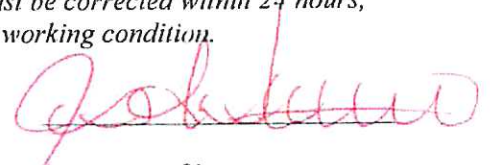

 Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
 • Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form																	
Project Name and Location <u>2nd + Choctaw REHAB 855</u>																	
Weather: <u>clear</u>		Pollution Control Measures (BMP) Checklist: <input checked="" type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input checked="" type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)															
Rain in last 24 hrs (inches): <u>.50</u>																	
Owner / Permittee: <u>BAKER CONST.</u>																	
A. Current Construction / Active Areas: <u>NONE</u>																	
B. Problem Areas / Special Observations (*Note problem areas ONLY below*): <table border="1"> <thead> <tr> <th>BMP</th> <th>Location</th> <th>Observations, Effectiveness, & Corrective Actions Ordered</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered												
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered															
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. <u>ALL CONSTRUCTION COMPLETE</u>																	
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:) 																	

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

7-30-18
 Date of
 Inspection


 Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
- Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location 2nd & CHOCTAW REHAB. 2017-855		
Weather: CLEAR & SUNNY	Pollution Control Measures (BMP) Checklist:	
Rain in last 24 hrs (inches): 1.3"	<input checked="" type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input checked="" type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)	
Owner / Permittee: BAKER CONSTRUCTION		
A. Current Construction / Active Areas: SIDEWALK SOUTH OF CHOCTAW		
B. Problem Areas / Special Observations (*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
NO ISSUES OBSERVED		
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		
NO PREVIOUS ITEMS		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

5/2/18
Date of Inspection

[Signature]
Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
 • Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Erosion and Sediment Control Inspection Report Form

Project Name and Location: 2017 855 2nd & CHOCTAW

Weather: Foggy

Rain in last 24 hrs (inches): TRACE

Owner / Permittee: BAKER CONST.

A. Current Construction / Active Areas:
NORTH CURB OF 2ND STREET @ CHOCTAW

Pollution Control Measures (BMP) Checklist:

- Inlet Barrier (i.e.: gravel bags)
- Sediment Barriers (i.e.: ditch checks)
- Erosion Blankets, Hydromulch / Seed, etc
- Stabilized Construction Entrance
- Stream Crossings
- Seed / Sod Areas
- Sediment Basins & Discharge Locations
- Borrow Areas
- General Site Condition (trash, etc)

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):

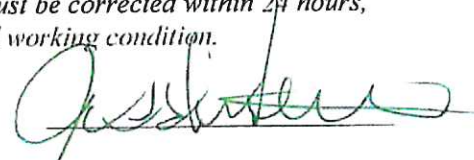
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered

C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. PARKING LOT / STRAW WATTLES AROUND DRAINS

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

1-8-18
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

From: Michael Stephan
Sent: Monday, February 11, 2019 4:52 PM
To: Colette Kiszka
Cc: Mike McDonald; Mike Hooper
Subject: FW: 2018 summary of programs
Attachments: 03-14-18 B&T PARK SWPPP INSPECTION.pdf; 03-27-18 SWPPP INSPECTION REPORT.pdf; SWPPP INSPECTION REPORT FOR WEST GLEN.pdf; Re: Erosion Control At West Glen

Mike Stephan
Project Manager
City of Leavenworth
100 North 5th Street
Leavenworth, Kansas 66048
Office: 913-684-0392
Cell: 913-547-2166
Fax: 913-682-1521
mstephan@firstcity.org

From: Barry Smith <bsmith@firstcity.org>
Sent: Monday, February 11, 2019 4:00 PM
To: Michael Stephan <mstephan@firstcity.org>
Subject: RE: 2018 summary of programs

In 2018 we had 45 detention basins.
44 hours have been spent on field inspection of the basins

I inspected 8 separate projects or 8 LDP's in 2018
192 total hours inspecting erosion control in the field.

From: Michael Stephan <mstephan@firstcity.org>
Sent: Thursday, February 07, 2019 1:01 PM
To: Justin Stewart <JStewart@firstcity.org>; Barry Smith <bsmith@firstcity.org>
Subject: FW: 2018 summary of programs

Guys,

Please read below.
I need number of LDP/Erosion Control Inspections for all the projects you worked on in 2018.

Thanks,

Mike S.

Mike Stephan

Colette Kiszka

From: Mike Reilly <mike.reilly@reillyinsurance.com>
Sent: Thursday, August 16, 2018 4:58 PM
To: Barry Smith
Cc: Mike Hooper; joan@reillyhomesinc.com; matt@lexeco.com; Michael Stephan; Cassidy Williams; Mark Kramer; Bill Corbet Jr.; Hal Burdette; Mike McDonald; Hank Wiehe (Hank@lexeco.com); Paul Kramer
Subject: Re: Erosion Control At West Glen

Barry,

The intersection of New Lawrence & Sunrise was cleaned up this morning and all streets were swept...even though the sweeping was completely unnecessary. We installed additional straw swaddles this afternoon and our concrete wash basin. Additional silt fence is being installed tomorrow. To depict West Glen as a problem where we have ignored everything about erosion control or the SWYPP is false. It is a construction zone...today we had Kansas Gas back in the community finishing their install...and yes - they don't care about our silt fence and therefore destroy anything in their path. At the present time...we have 19 cars parked on the curbs in the community with workers...some of whom I'm sure are off the curb and will therefore track mud...it's not going to be a perfect situation.

I am usually not an email responder type of guy..but with 10 people included on this email chain I felt the need to defend our actions and the project. I would challenge anyone on this email chain to drive through our project and explain to me how anything we haven't done arises to the threat of being shut down. It is a constant work in progress and one that is at the beginning stages.

Let's not get into an email back and forth please. I am out of town tomorrow but would be interested in walking the site with you early next week. I am available Monday anytime after 11 and Tuesday anytime after 10. Thanks.

Mike

Sent from my iPhone

On Aug 16, 2018, at 2:22 PM, Barry Smith <bsmith@firstcity.org> wrote:

Mike Hooper-

I went by there over lunch hour and took pictures. I didn't see a difference in anything.

Barry

From: Mike Hooper

Sent: Wednesday, August 15, 2018 2:28 PM

To: 'mike.reilly@reillyinsurance.com' <mike.reilly@reillyinsurance.com>; 'joan@reillyhomesinc.com' <joan@reillyhomesinc.com>

Cc: 'matt@lexeco.com' <matt@lexeco.com>; Michael Stephan <mstephan@firstcity.org>; Cassidy Williams <cwilliams@firstcity.org>; Mark Kramer <mkrumer@firstcity.org>; Bill Corbet Jr. <bcorbet@firstcity.org>; Hal Burdette <HBurdette@firstcity.org>; Barry Smith <bsmith@firstcity.org>; Mike McDonald <MMcDonald@firstcity.org>; Hank Wiehe (Hank@lexeco.com) <Hank@lexeco.com>;

Paul Kramer <pkramer@firstcity.org>
Subject: RE: Erosion Control At West Glen

Mike,

Please find attached the LDP violation letter regarding the West Glen Subdivision and homes under construction in the development.

Mike

From: Barry Smith
Sent: Wednesday, August 15, 2018 12:37 PM
To: 'Mike Reilly (mike.reilly@reillyinsurance.com)' <mike.reilly@reillyinsurance.com>
Cc: 'matt@lexeco.com' <matt@lexeco.com>; Michael Stephan <mstephan@firstcity.org>; Mike Hooper <mhooper@firstcity.org>; Cassidy Williams <cwilliams@firstcity.org>; Mark Kramer <mkramer@firstcity.org>; Bill Corbet Jr. <bcorbet@firstcity.org>; Hal Burdette <HBurdette@firstcity.org>
Subject: RE: Erosion Control At West Glen

Mr. Reilly,

Attached is my SWWP report for yesterday's rain event. There needs to be some maintenance and updating to BMPs out there. At the entrance to Sunrise St from New Lawrence Rd there needs to be some silt fence to stop the silt from running to the streets. All the silt fence that has fallen down or been ran over needs stapled up. All the inlet protection in the whole subdivision needs the silt removed and the streets swept. I would also like to see a wash out pit for the concrete trucks. I'm not sure if Lexeco is still responsible for maintaining the erosion control since you are building houses but the project has not been accepted by the City yet. Let me know when it can get taken care of.

Please and thank you,

Barry

From: Barry Smith
Sent: Wednesday, August 08, 2018 12:19 PM
To: 'Mike Reilly (mike.reilly@reillyinsurance.com)' <mike.reilly@reillyinsurance.com>
Cc: 'matt@lexeco.com' <matt@lexeco.com>; Michael Stephan <mstephan@firstcity.org>; Mike Hooper <mhooper@firstcity.org>; Cassidy Williams <cwilliams@firstcity.org>; Mark Kramer <mkramer@firstcity.org>; Bill Corbet Jr. <bcorbet@firstcity.org>; Hal Burdette <HBurdette@firstcity.org>; Mike McDonald <MMcDonald@firstcity.org>
Subject: RE: Erosion Control At West Glen

Mr. Reilly-

I attached my SWPP inspection report for the project. Please review it.

Sincerely,

*Barry Smith
Engineering Technician
City of Leavenworth
100 N 5th St.*

Leavenworth, KS 66048
bsmith@firstcity.org
Office: 913-684-0375
Mobile: 913-787-7474

From: Barry Smith
Sent: Wednesday, August 08, 2018 12:05 PM
To: Mike Reilly (mike.reilly@reillyinsurance.com) <mike.reilly@reillyinsurance.com>
Cc: matt@lexeco.com; Michael Stephan <mstephan@firstcity.org>; Mike Hooper <mhooper@firstcity.org>; Cassidy Williams <cwilliams@firstcity.org>; Mark Kramer <mkramer@firstcity.org>; Bill Corbet Jr. <bcorbet@firstcity.org>; Hal Burdette <HBurdette@firstcity.org>; Mike McDonald <MMcDonald@firstcity.org>
Subject: Erosion Control At West Glen

Mr. Reilly-

There is no erosion control at all for the new houses built in the West Glen Subdivision. Every lot needs a construction entrance and contained within itself with silt fence or biologs. The curb inlet protection needs maintained throughout the development of this subdivision. In addition, there needs to be silt fence at the back of the properties separating the subdivision from the business park and inlet protection around the area inlets along that property line. This was brought to my attention because mud is tracking into the streets. Please have the streets effected by the mud and the erosion control installed as soon as possible.

Sincerely,

Barry Smith
Engineering Technician
City of Leavenworth
100 N 5th St.
Leavenworth, KS 66048
bsmith@firstcity.org
Office: 913-684-0375
Mobile: 913-787-7474

***The message and documents transmitted with this e-mail contain confidential or privileged information belonging to the sender and it is intended only for the individual or entity to whom it is addressed. Unauthorized use of this communication is strictly prohibited and may be unlawful. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message and any attachments. ***

SWPPP INSPECTION

Project Information	
Name/Location	BUSINESS AND TECHNOLOGY PARK 2016-849/WESTGLEN
Contractor	LEXECO
Inspection Information	
City Inspector	BARRY SMITH
Inspection Date	03-14-18
Weather Information	
Rain Gauge: 2.5 INCHES OF BETWEEN 3-12 AND 3-13	
Current Weather at time of this inspection: 40 DEGREES AND SUNNY,	
Weather Forecast at time of this inspection: (when is next precipitation or wind event anticipated?) RAIN FORCASTED FOR 3-16	

EROSION AND SEDIMENTATION BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are Limits of Disturbance clearly marked?	Y	
Are natural resource areas (e.g., streams, wetlands, trees, etc.) <u>protected</u> with barriers or similar BMPs?	Y	
Is construction sequencing being followed?	Y	
Are structural BMPs properly installed to <u>control stormwater flow</u> on the construction site?	Y	
Do unstabilized areas have appropriate <u>controls</u> in place?	Y	
Are all slopes <u>protected</u> from concentrated stormwater flow?	Y	
Are storm drain inlets properly <u>protected</u> ?	N	A3, A2, A1 NEED PROTECTION. NOTIFIED HANK AND HE SAID REPAIRS WOULD BE MADE

SWPPP INSPECTION

EROSION AND SEDIMENTATION BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are storm drain outfalls properly protected?	Y	
Are perimeter controls and sediment barriers adequately <u>installed and maintained</u> ?	Y	
Are discharge points and receiving waters <u>free of sediment</u> deposits?	N	SEDIMENT IS COLLECTING AT OUTFALL A5 AND M3(EAST DETENTION BASIN)
Is weather forecast being <u>checked</u> regularly?	Y	

GOOD HOUSEKEEPING BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are BMPs effectively limiting sediment from being <u>tracked</u> into the street?	Y	
Is trash/litter from work areas collected and placed in <u>covered</u> containers regularly?	Y	
Are on-site equipment , vehicles, containers, and storage areas <u>free from leaks</u> ?	Y	
Are materials that are potential stormwater contaminants <u>stored</u> inside or under cover?	Y	
Are non-storm water discharges free from <u>contamination</u> ?	Y	
Are washout facilities (e.g. paint, concrete) <u>available</u> , clearly <u>marked</u> , and maintained and <u>located</u> at least 50-feet away from natural resources and storm drains?	Y	
Are vehicle and equipment fueling, cleaning, and maintenance areas <u>free from leaks</u> and <u>located</u> at least 50-feet away from natural resources and storm drains?	Y	
Is dust being <u>controlled</u> on-site?	Y	
Is sweeping being <u>used</u> to keep sediment off roads and parking lots?	Y	
Are the SWPPP and ALL inspection reports being kept at the field?	Y	

SWPPP INSPECTION

Project Information	
Name/Location	BUSINESS AND TECHNOLOGY PARK 2016-849/WESTGLEN
Contractor	LEXECO
Inspection Information	
City Inspector	BARRY SMITH
Inspection Date	03-27-18
Weather Information	
Rain Gauge: .34 INCHES	
Current Weather at time of this inspection: 46 *	
Weather Forecast at time of this inspection: (when is next precipitation or wind event anticipated?)	SNOW FORCASTED FOR 4-01-18

EROSION AND SEDIMENTATION BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are Limits of Disturbance clearly marked?	Y	
Are natural resource areas (e.g., streams, wetlands, trees, etc.) <u>protected</u> with barriers or similar BMPs?	Y	
Is construction sequencing being followed?	Y	
Are structural BMPs properly installed to <u>control stormwater flow</u> on the construction site?	Y	
Do unstabalized areas have appropriate <u>controls</u> in place?	Y	
Are all slopes <u>protected</u> from concentrated stormwater flow?	Y	
Are storm drain inlets properly <u>protected</u> ?	Y	A3, A2, A1 CORRECTED FROM LAST INSPECTION

SWPPP INSPECTION

EROSION AND SEDIMENTATION BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are storm drain outfalls properly <u>protected</u> ?	Y	
Are perimeter controls and sediment barriers adequately <u>installed and maintained</u> ?	Y	
Are discharge points and receiving waters <u>free of sediment</u> deposits?	N	SEDIMENT IS COLLECTING AT OUTFALL A5 AND M3(EAST DETENTION BASIN)
Is weather forecast being <u>checked</u> regularly?	Y	

GOOD HOUSEKEEPING BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are BMPs effectively limiting sediment from being <u>tracked</u> into the street?	Y	
Is trash/litter from work areas collected and placed in <u>covered</u> containers regularly?	Y	
Are on-site equipment , vehicles, containers, and storage areas <u>free from leaks</u> ?	Y	
Are materials that are potential stormwater contaminants <u>stored</u> inside or under cover?	Y	
Are non-storm water discharges free from <u>contamination</u> ?	Y	
Are washout facilities (e.g. paint, concrete) <u>available</u> , clearly <u>marked</u> , and maintained and <u>located</u> at least 50-feet away from natural resources and storm drains?	Y	
Are vehicle and equipment fueling, cleaning, and maintenance areas <u>free from leaks</u> and <u>located</u> at least 50-feet away from natural resources and storm drains?	Y	
Is dust being <u>controlled</u> on-site?	Y	
Is sweeping being <u>used</u> to keep sediment off roads and parking lots?	Y	
Are the SWPPP and ALL inspection reports being kept at the field?	Y	

SWPPP INSPECTION

Project Information	
Name/Location	BUSINESS AND TECHNOLOGY PARK 2016-849/WESTGLEN
Contractor	LEXECO/Reilly
Inspection Information	
City Inspector	BARRY SMITH
Inspection Date	8/7/18
Weather Information	
Rain Gauge: .54	
Current Weather at time of this inspection: 86 and raining	
Weather Forecast at time of this inspection: (when is next precipitation or wind event anticipated?) Rain expected Friday 8/10/18	

EROSION AND SEDIMENTATION BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are Limits of Disturbance clearly marked?	N	Need silt fence separating the West Glen Project from the B&T
Are natural resource areas (e.g., streams, wetlands, trees, etc.) <u>protected</u> with barriers or similar BMPs?	Y	
Is construction sequencing being followed?	Y	
Are structural BMPs properly installed to <u>control stormwater flow</u> on the construction site?	N	THE SUBDIVISION LOTS NEED INDIVIDUAL BMP`S
Do unstabilized areas have appropriate <u>controls</u> in place?	N	
Are all slopes <u>protected</u> from concentrated stormwater flow?	N	
Are storm drain inlets properly <u>protected</u> ?	Y	INLETS PROTECTION NEEDS CLEANED AND MAINTAINED

SWPPP INSPECTION

EROSION AND SEDIMENTATION BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are storm drain outfalls properly <u>protected</u> ?	Y	
Are perimeter controls and sediment barriers adequately <u>installed</u> and <u>maintained</u> ?	N	WEST GLEN NEED INDIVIDUAL PROTECTION ON EACH LOT
Are discharge points and receiving waters <u>free of sediment</u> deposits?	N	STREEM WATERS APPEAR LIGHT BROWN
Is weather forecast being <u>checked</u> regularly?	Y	

GOOD HOUSEKEEPING BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are BMPs effectively limiting sediment from being <u>tracked</u> into the street?	N	STREETS NEED SWEEPED
Is trash/litter from work areas collected and placed in <u>covered</u> containers regularly?	N	TRASH NEEDS PICKED UP AROUND THE SUBDIVISION
Are on-site equipment , vehicles, containers, and storage areas <u>free from leaks</u> ?	Y	
Are materials that are potential stormwater contaminants <u>stored</u> inside or under cover?	Y	
Are non-storm water discharges free from <u>contamination</u> ?	Y	
Are washout facilities (e.g. paint, concrete) <u>available</u> , clearly <u>marked</u> , and maintained and <u>located</u> at least 50-feet away from natural resources and storm drains?	N	THE SUBDIVISION NEED A SPECIFIC WASH OUT AREA WITH PROTECTION FOR CONCRETE TRUCKS TO CLEAN SHUTES
Are vehicle and equipment fueling, cleaning, and maintenance areas <u>free from leaks</u> and <u>located</u> at least 50-feet away from natural resources and storm drains?	Y	
Is dust being <u>controlled</u> on-site?	Y	
Is sweeping being <u>used</u> to keep sediment off roads and parking lots?	N	STREETS NEED SWEPT
Are the SWPPP and ALL inspection reports being kept at the field?	N	CONTRACTOR NEEDS TO KEEP INSPECTION REPORTS FOR .5 INCHES OF RAIN OR BETTER



Bmp 4

August 15, 2018

Mike Reilly
Reilly Homes
602 Delaware
Leavenworth, KS 66048

RE: West Glen Subdivision
New Home Construction in West Glen Sub.

Mr. Reilly,

It has been brought to my attention that the erosion control measures for the West Glen Subdivision and all of the new home construction, is not installed and being maintained in accordance with the requirements of the Land Disturbance Permits issued. Your contractors and management personnel have been notified on numerous occasions of the deficiencies on-site and have failed to make the necessary corrections or installation of the appropriate measures.

In accordance with Chapter 46, Environment, Article III, Stormwater, Section 46-268, you are hereby notified to correct all deficiencies required by the issuance of the Land Disturbance Permits for the West Glen Development and new home construction by 12:00 p.m. (noon) on Friday, August 17, 2018.

Said required installation and repairs include and are not limited to the following items;

1. Install silt fence or appropriate BMP at the intersection of Sunrise and New Lawrence Rd.
2. Complete maintenance of all existing silt fence and BMP's within and around the development.
3. Install wash out pit for all concrete trucks.
4. Install all required erosion control measures per plans submitted for LDP around buildings under construction.
5. Provide a copy of all inspection reports to Engineering Tech, Barry Smith.

Remove all silt, dirt, debris from the streets and inlets as necessary. All cleaning work on streets and inlets must be completed by 12:00 p.m. (noon) on Thursday, August 16.

Failure on your part to complete the items necessary to by the times and dates identified above, will result in the City issuing a "STOP WORK ORDER" for all building construction within the development, initiate action required to abate the nuisance and LDP violations. All costs for the abatement of the nuisance and LDP violations to include administrative costs, materials, equipment, and personnel will be charged to the property owner.

If you have any questions regarding this letter or the information included herein, don't hesitate to contact Barry Smith at 913-684-0373 or myself at 913-684-0375.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Hooper".

Mike Hooper
Deputy Director of Public Works



Stop Work Order

March 22, 2018

LD Phillips Quality Homes
30578 207th St.
Easton, KS 66020

Re: Violation of Storm Water Management and Land Disturbance Permit Regulations

To Whom It May Concern:

It has been brought to the attention of the Inspections Division of the City of Leavenworth that the construction site located at 4119 Cades Cove is not addressing storm water management according to the plans that were submitted and approved with the issuance of Land Disturbance Application No.2799. The deficiencies at this location are as follows;

1. Install erosion control measures on East and South sides of site
2. Place aggregate in construction entrance to keep mud/soil on site
3. Clear mud/dirt from street.

Your actions are in violation of Section 301(a) of the CWA, 33 U.S.C. § 1311(a), which prohibits the discharge of pollutants from a point source into a navigable water of the United States and Chapter 54, Article II. Nuisances, Section 54-66 (4), Section 54-67 (9), and Section 54-68 of the Leavenworth City Code.

It is the opinion of the Director of Public Works, that this nuisance creates an actual and immediate danger to the public. **You are hereby notified to STOP ALL WORK at this location until all BMP and/or Erosion Control Measure issues are resolved.** No further construction work can continue at this location until all issues listed above are resolved.



Failure on your part to stop all work immediately and abate the nuisance within 24 hours of the date of this notice, will result in the City filing a complaint in Leavenworth Municipal Court. Any person/firm/ corporation violating any of the provisions of Chapter 54, Article II. Nuisances, Section 54-66 (4), Section 54-67 (9), and Section 54-68 of the Leavenworth City Code shall be guilty of a Class C offense.

Efforts to resolve the issues related to the storm water management must be coordinated with the Inspections Division.

You may also contact me at 913-684-0378 if I can be of assistance.

Sincerely,

A handwritten signature in blue ink, which appears to read "Harold D. Burdette", is written over the typed name. The signature is stylized and somewhat cursive.

Harold D. Burdette
Chief Building Inspector

Cc: Paul Kramer, City Manager
Mike McDonald, Director of Public Works
Project Files

Mike Hooper

From: Cassidy Williams
Sent: Wednesday, June 27, 2018 8:41 AM
To: Mike Hooper
Subject: RE: 3924 Muncie

I shall do my best!

From: Mike Hooper
Sent: Tuesday, June 26, 2018 2:37 PM
To: Cassidy Williams ; Mark Kramer
Subject: RE: 3924 Muncie

McDonald would like the property owner to install his erosion control before this weekend. Can you get a hold of him and relay the message, Please.

Thanks

Mike

From: Cassidy Williams
Sent: Monday, June 25, 2018 2:12 PM
To: Mark Kramer
Cc: Mike Hooper
Subject: RE: 3924 Muncie

Owner said he would have "something" up by this weekend.

Mark, will you please note to drive by Friday afternoon at the latest to see what the something is.

*Cassidy Williams
Clerk/Receptionist
City of Leavenworth
100 N. 5Th St.
Leavenworth Ks, 66048*

cwilliams@jrstcity.org

913-684-0378

From: Mark Kramer
Sent: Friday, June 22, 2018 11:11 AM
To: Cassidy Williams
Cc: Mike Hooper
Subject: 3924 Muncie

INITIAL INSPECTION: DRIVEWAY/APPROACH

1. Provide erosion control to prevent silt/soils from leaving the property and install straw mat or equal at ditch bottom & sides to contain silt/soil
2. Install gravel sub-base and pave per city specs
3. Verify driveway slope into property as it appears quite steep

From: Mark Kramer
Sent: Friday, June 22, 2018 10:13 AM
To: Mark Kramer
Subject: 23392405 Muncie

From my Android phone on T-Mobile. The first nationwide 4G network.

Cassidy Williams

From: Cassidy Williams
Sent: Monday, December 11, 2017 4:07 PM
To: 'TIM@REMCODEMO.COM'
Cc: Mary Dwyer
Subject: FW: 709 OAK AP 3049
Attachments: 709 OAK.jpg

Please see the deficiencies noted below and address them within 48 hours. Additionally, you will need to contact the Inspection Department to schedule a follow up inspection once repairs are made.

Feel free to contact me with any questions you may have.

*Cassidy Williams
Clerk/Receptionist
City of Leavenworth
100 N. 5th St.
Leavenworth Ks, 66048
cwilliams@firstcity.org
913-684-0378*

From: Bill Corbet Jr.
Sent: Monday, December 11, 2017 2:55 PM
To: Cassidy Williams <cwilliams@firstcity.org>
Subject: 709 OAK AP 3049

The silt fence needs to be repaired here, it only has about one staple per stake holding it up. I think the wind last week messed it up

*Bill Corbet
Inspector
City of Leavenworth
100 N. 5th St.
Leavenworth KS, 66048
bcorbet@firstcity.org
913-684-0381*

Cassidy Williams

From: Cassidy Williams
Sent: Monday, January 08, 2018 3:34 PM
To: Mary Dwyer
Cc: Bill Corbet Jr.
Subject: 709 OAK -FAILED BIWEEKLY INSPECTION
Attachments: 709 OAK.jpg

Please note there were deficiencies noted on Bill inspection today, 1-8-18. Please make corrections and notify the Inspection Department so a follow up inspection can be performed.

EROSION CONTROL – BIWEEKLY INSPECTION – DISAPPROVED:

1. REPAIR SILT FENCE
2. CLEAN UP SEED/STRAW IN RIGHT OF WAY

*Cassidy Williams
Clerk/Receptionist
City of Leavenworth
100 N. 5Th St.
Leavenworth Ks, 66048
cwilliams@firstcity.org
913-684-0378*

Cassidy Williams

From: Cassidy Williams
Sent: Tuesday, February 06, 2018 11:06 AM
To: 'TIM@REMCODEMO.COM'
Cc: Mary Dwyer; Bill Corbet Jr.
Subject: BIWEEKLY INSPECTION-FAILED 709 OAK (AP 3049)

Importance: High

Please address the deficiencies noted below and call for a follow up inspection.

Per City Ordinances, all deficiencies need to be addressed within 48 hours.

*Cassidy Williams
Clerk/Receptionist
City of Leavenworth
100 N. 5Th St.
Leavenworth Ks, 66048
cwilliams@firstcity.org
913-684-0378*

From: Bill Corbet Jr.
Sent: Tuesday, February 06, 2018 10:00 AM
To: Cassidy Williams <cwilliams@firstcity.org>
Subject: 709 OAK (AP 3049)

1- Silt fence still needs repaired.

*Bill Corbet
Inspector
City of Leavenworth
100 N. 5th St.
Leavenworth KS, 66048
bcorbet@firstcity.org
913-684-0381*

Erosion and Sediment Control Inspection Report Form

Project Name and Location 709 OAK AP 3049 DEMO

Weather: 25 CLEAR

Rain in last 24 hrs (inches): 0

Owner / Permittee: REMCO

A. Current Construction / Active Areas:

Pollution Control Measures (BMP) Checklist:

- Inlet Barrier (i.e.: gravel bags)
- Sediment Barriers (i.e.: ditch checks)
- Erosion Blankets, Hydromulch / Seed, etc
- Stabilized Construction Entrance
- Stream Crossings
- Seed / Sod Areas
- Sediment Basins & Discharge Locations
- Borrow Areas
- General Site Condition (trash, etc)

B. Problem Areas / Special Observations (*Note problem areas ONLY below*):

BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
SILT FENCE	NORTH SIDE	NOT INSTALLED CORRECTLY, BURY SILT FENCE TO FIRST LINE

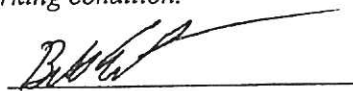
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

D. Have items noted on last inspection been corrected? Yes No (If No, Explain:)

↳ CONTRACTOR CONTACTED ON 2-6-18 & 2-12-18, BY EMAIL, have not recieved a response

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

2-16-18
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
- Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Appendix D (Continued)

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report – Section E) (BMP Number 5)

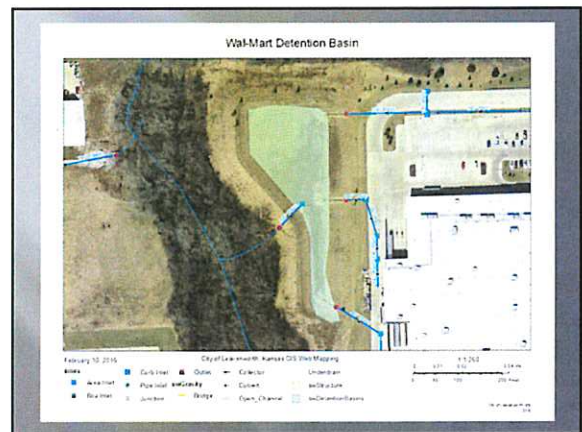
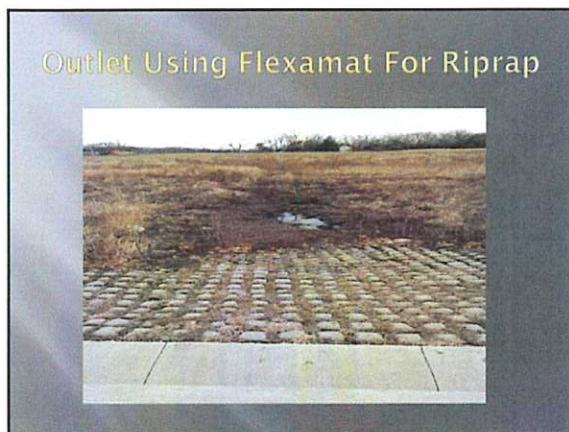
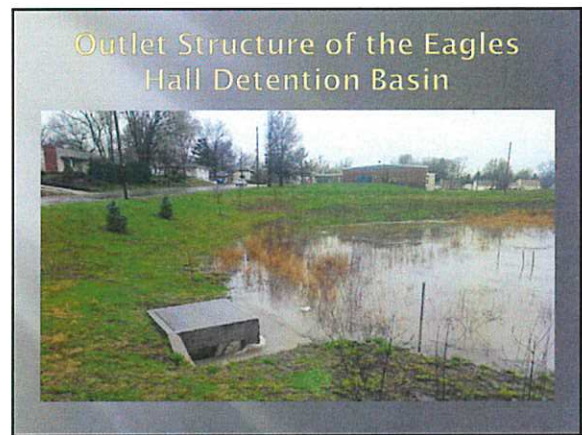
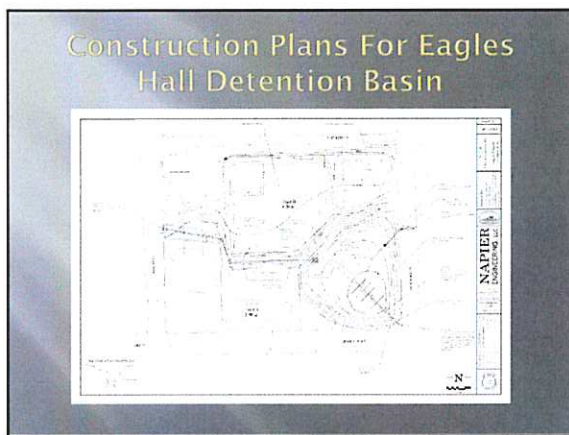
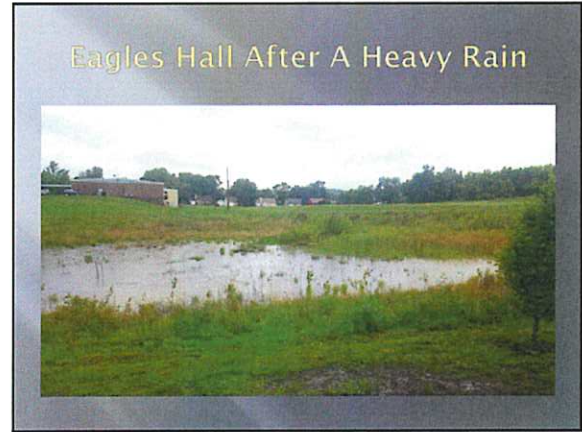
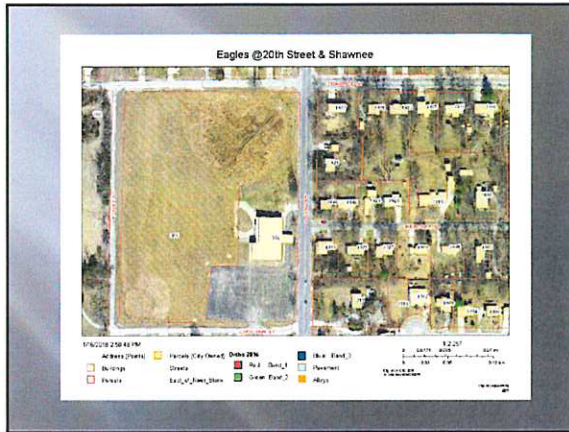
BMP 5 – Post-Construction Site Stormwater Management in New Development and Redevelopment

- Detention Basin PowerPoint Presentation for Annual Meeting
- Annual Meeting Material

Detention Pond Slideshow

March 22, 2018

3/23/2018



Walmart Basin With A Forebay To Slow Flow And Catch Sediment



This Basin Has A Concrete Trickle Channel



The Outlet Structure With Trash Screens. The Top Of The Outlet Is Open For Emergency Overflow



1028 Mason Detention Basin

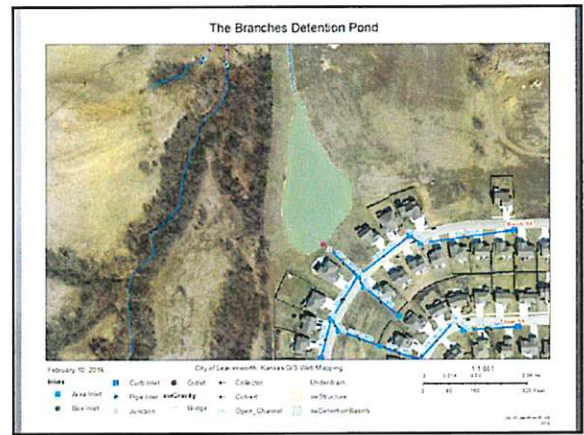
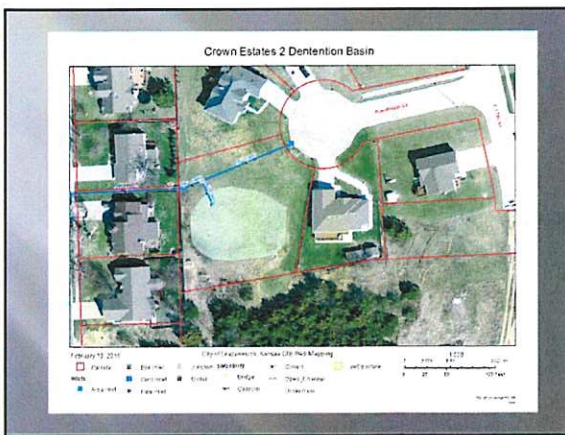
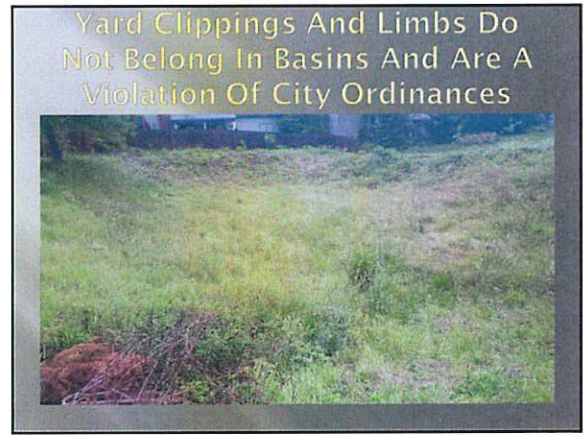
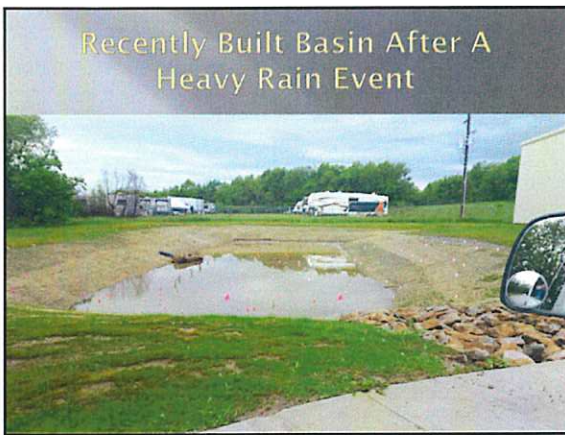
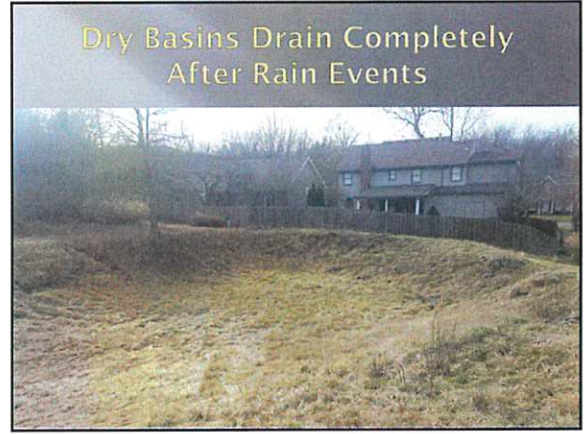
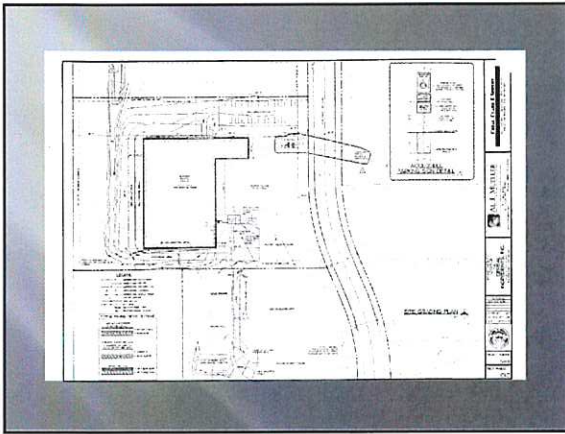


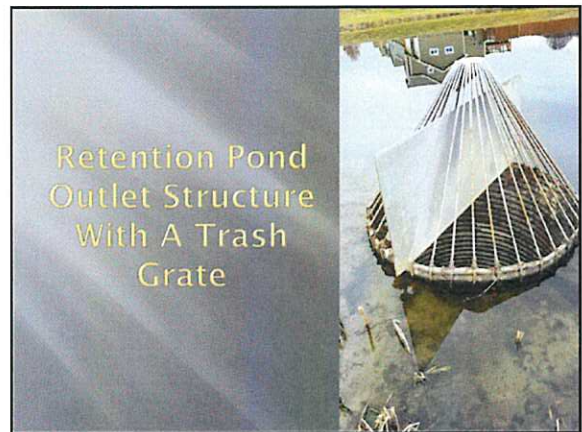
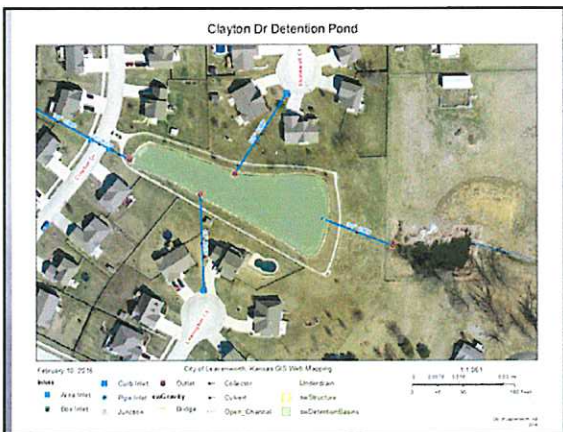
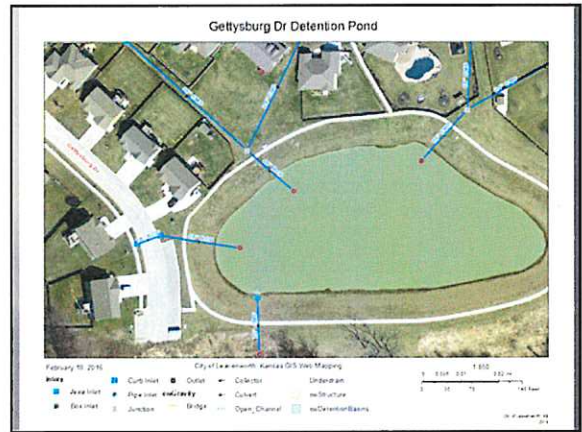
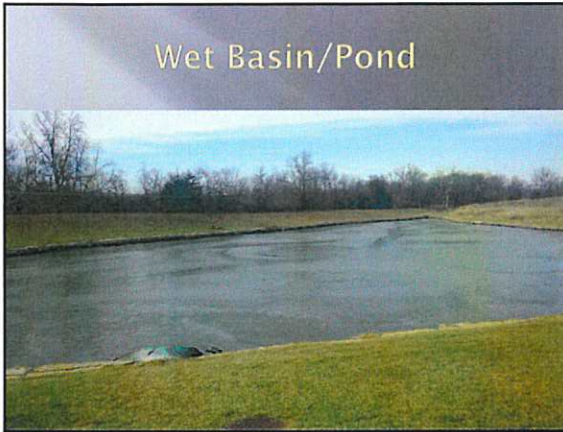
Highland Pointe Denton Basin

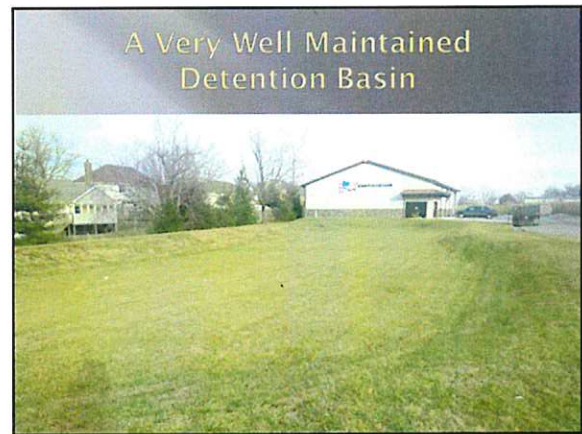
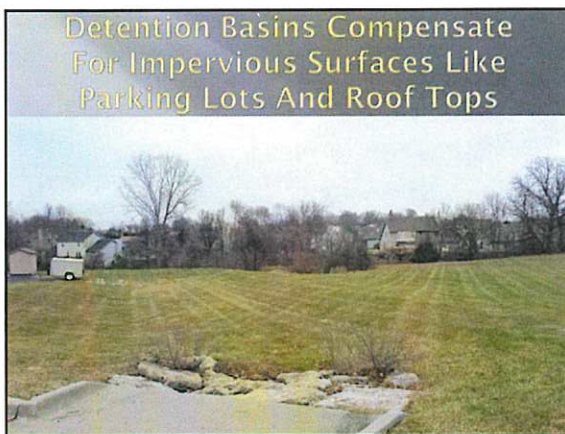
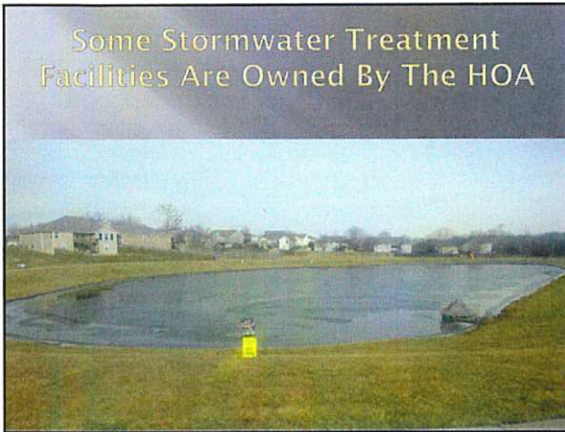


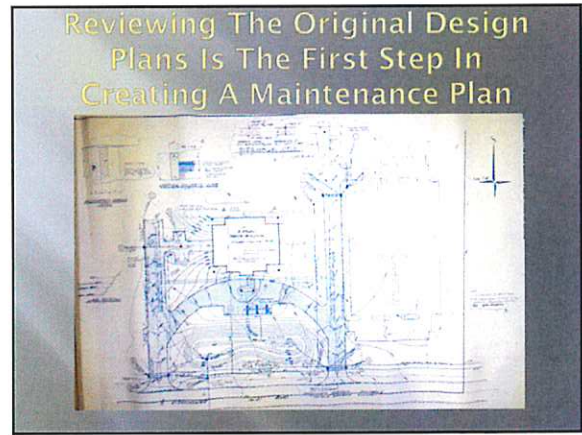
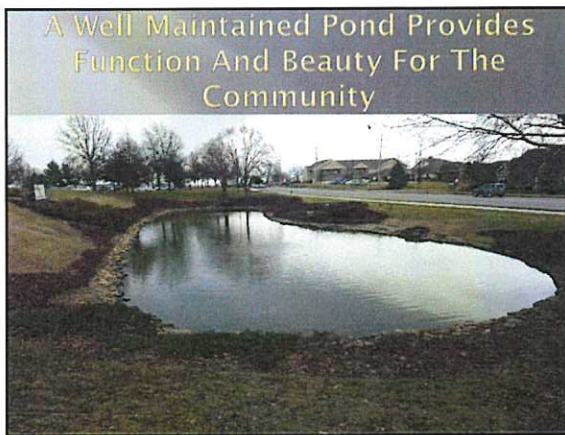
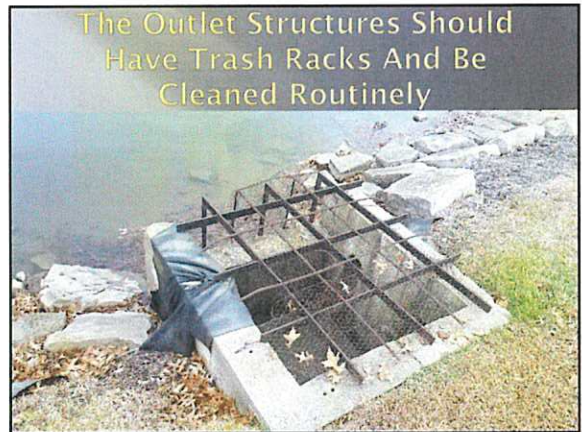
Recently Mowed To Control Tall Weeds







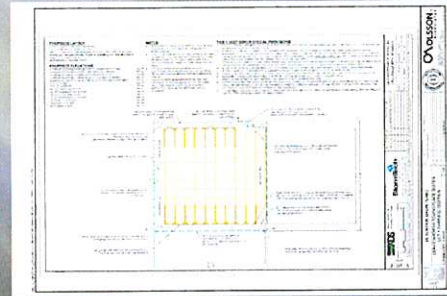




Underground Basin During Construction



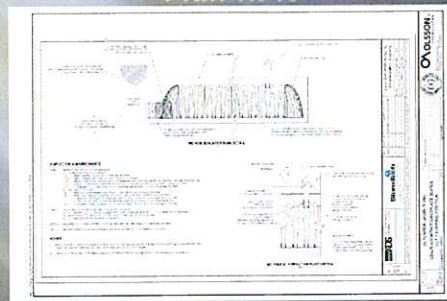
Original Construction Plans Will Show How The Basin Will Properly Function



Underground Detention Basin



The Design Plans Should Have The Inspection and Maintenance Plan In It



Underground Basin During Construction



Erosion
Should Be
Repaired
Immediately



Don't Let Trees And Weeds Take Over. This Is Not In Compliance With City Ordinances And Will Be Expensive To Repair



Pervious Pavement Is A BMP That Functions Like A Detention Basin



Pervious Pavement During A Rain Event



CONTAMINATION ACTION PLAN!

The City of Leavenworth is required to evaluate the effectiveness of facilities constructed to address stormwater runoff within the city. Maintenance and operation of ponds and detention basins are regulated by the Environmental Protection Agency (EPA), Kansas Department of Health and Environment (KDHE), and the City of Leavenworth, Kansas. Inspection and maintenance of the facility is typically provided by the property owner and/or a home owner's association.

Owners of ponds are expected to be prepared to react in the event of a chemical spill or other contamination that impacts the water in their pond. The City of Leavenworth is requesting that you submit inspection reports and an action plan showing how you will report, contain, and protect the City stormwater system in case your detention basin is contaminated by chemical spills, sanitary sewer overflows, or other forms of contamination.

If contamination occurs within the detention basin, action needs to be taken to mitigate pollution to the water and soil within the City stormwater system. The KDHE website lists actions to be taken at: www.kdheks.gov/spill/download/KS_Spill_Reporting.pdf. Below is a list of recommended immediate actions to be taken and phone numbers of authorities to be contacted.

- ✓ Containing the spillage by means of the safest practical way possible by blocking the outflow of the structure or downstream.
- ✓ If the release is not contained or threatens the health or safety of the local population **dial 911**.
- ✓ Contact the City **Water Pollution Control 24/7: 913-682-1090**.
- ✓ If a spill exceeds the reportable quantities of federally-listed hazardous materials,
 - **dial 911**
 - **Contact Leavenworth County Emergency Management:**
 - i. **913-684-0455** or
 - ii. **Sheriff Office 913-682-1313**
 - Work with the authorities to contain contaminants.
 - **The Kansas Commission on Emergency Planning & Response (CEPR) – 785-274-1394** – requires verbal notification and a follow-up written report within seven days after the verbal report.
- ✓ Whenever a spill exceeds the reportable quantities of federally-listed hazardous materials, it must also be reported to the National Response Center (NRC). Federal law also requires any oil spill that has impacted or threatens a waterway must be reported to the NRC. EPA Region 7 Emergency Response Branch personnel monitor the NRC reports and may call the spiller back for more information. **NRC's 24-hour number is: 800-424-8802.**
- ✓ Immediately make verbal notification to the Kansas Department of Health and Environment. **The Kansas Spill Reporting Number is: (24/7) 785-291-3333.**

March 22, 2018

City of Leavenworth

Detention Basin and Best Management Practices Meeting

This meeting is an informal opportunity for owners and operators of detention basins and “Best Management Practice” (BMP) installations to meet city staff to discuss operations and expectations.

The City is regulated by Kansas Department of Health and Environment (KDHE) and Environmental Protection Agency (EPA) in regards to stormwater. Many subdivisions, commercial properties, roadways and other projects have been built with special designs related to water quality and water quantity.

The city has been informed by EPA that these installations must be maintained in such a manner that they continue to meet their design criteria, and that it is the responsibility of the city to ensure that these facilities are maintained.

The City expects all of the various ponds, pervious concrete, grass strips, bio-swales and other installations required to be constructed as part of an approved set of plans are expected to have the following provided for our records:

- Maintenance plan.
- Annual submittal of maintenance activities.
- Contamination Control Plan for ponds and basins.

It is expected that within a few years the following will be in-place

- The above expectations will become requirements
- An annual fee for each pond and/or BMP will be established

**DETENSION BASIN OWNER'S
INSPECTIONS AND MAINTENANCE
PUBLIC MEETING AGENDA
March 22, 2018 4:30 to 6:30 pm**

CITY OF LEAVENWORTH CONTACTS:

- Michael McDonald, Director of Public Works
1-913-684-0375, (mmcdonald@firstcity.org)
- Mike Hooper, Deputy Director of Public Works
1-913-684-0375, (mhooper@firstcity.org)
- Mike Stephan, Project Manager – Public Works Engineering
1-913-684-0375, (mstephan@firstcity.org)
- Barry Smith, Engineering Technician – Public Works Engineering
1-913-684-0375, (bsmith@firstcity.org)

RESOURCES FOR ADDITIONAL INFORMATION:

- www.lvks.org (City of Leavenworth Website)
- www.kcmetro.apwa.net/details/439 (Kansas City Chapter of the American Public Works Association)
- www.kdheks.gov/spill/ (Kansas Department of Health & Environment)
- www.epa.gov/remedytech/citizens-guide-excavation-contaminated-soil (Environmental Protection Agency)

TYPES OF BASINS:

- Detention Basin/Pond (Dry Pond)
 - Designed to hold back or detain storm water for a short period of time.
 - Helps prevent/reduce flooding.
- Retention Basin/Pond (Wet Pond)
 - Designed to continually hold or retain storm water for extended period of time.
 - This type will be "wet" all of the time.

OTHER TYPES OF BMP'S:

- Pervious Pavement
 - Porous concrete pavement that allows run-off water to leave a site quickly.
 - Designed to detain storm water in a clean gravel pit.
 - This is constructed under the pavement.
- Bio-Swales
 - Designed to detain storm water for a short time.
 - Uses a grate which will take high flows.
 - Low flows will soak through special soil mix and into storm drain.
- Bio-Swales
 - Designed to detain storm water for a short time.
 - Uses a grate which will take high flows.
 - Low flows will soak through special soil mix and into storm drain.
- Underground Detention Systems
 - Designed to detain storm water underground.
 - Allows for site footprint to be used as parking lot or other similar uses.
 - Low flows will soak through gravel drainage bed and into the ground.
 - High flows will drain into the storm sewer when gravel drainage bed is full.

TOPICS OF CONCERN REGARDING INSPECTION & MAINTENANCE:

- Weed Control
- Brush Control
- Erosion Control
- Plan of Action for Contaminated Spills
- Inspections Completed and Reported
- Inlet & Outlet Maintenance (Keeping Clear of Growth and Debris)
- Future Fees and/or Penalties
- Possible future Engineer Stamp requirement. (Stamp is presently required on new construction)

SAMPLE CHECKLIST FOR CONTAMINATION SPILLS

It's a good idea to have the basic checklist, a map of the stormwater system, and a list of responsible party contact information conveniently available in the case of an emergency. Below is a basic checklist for use as an example.

- ✓ Contact the authorities and identify basic information on the spill:
 - Quantity and location of the spill.
 - Type of contaminants.
 - Time of spill.
 - Whether injuries have occurred.
 - Status of containment efforts.

- ✓ Implement the immediate action plan:
 - Obtain medical assistance if there has been an injury.
 - Prevent sources of ignition for flammable materials.
 - Contain the spill.

- ✓ Notification of governmental authorities and others may be required:
 - Identify applicable reporting requirements from laws, rules, and permits.
 - Make notification as required by law, and notify neighbors if appropriate.

- ✓ Respond and clean up as required by law:
 - Call an outside contractor?
 - Manage waste materials in accordance with the law.

- ✓ Document events, notifications, and response actions through photographs, written summaries, copies of documents, etc.

- ✓ Make written follow-up reports to government agencies and others as required by law.

- ✓ Review spill to determine root cause and opportunities for prevention of similar spills.

BASIN

COMPONENTS



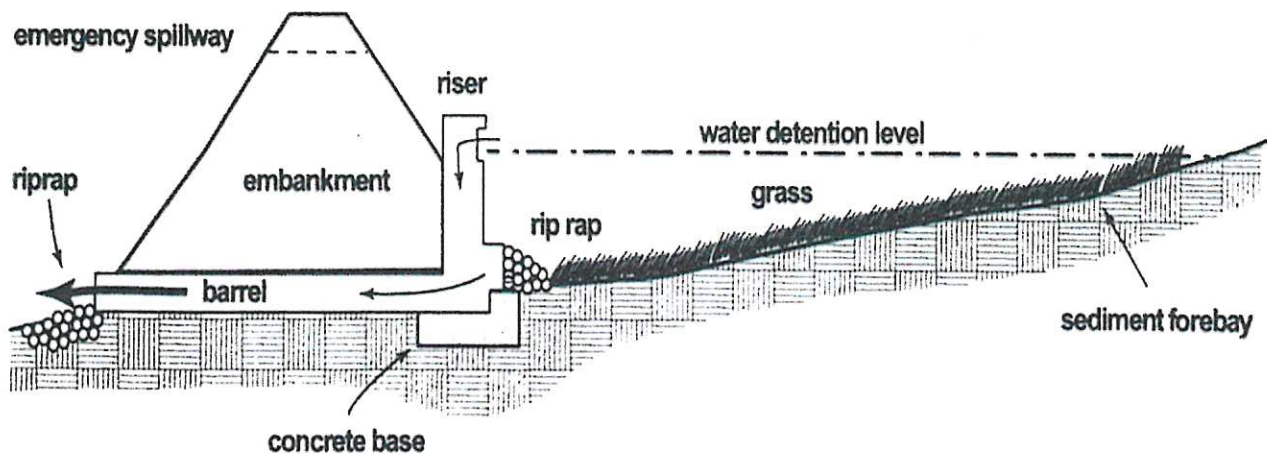
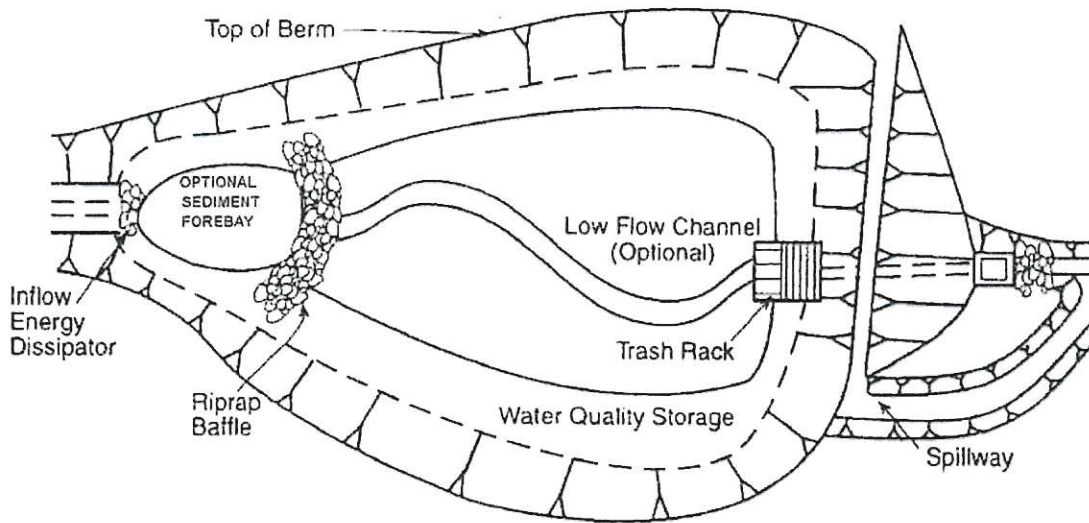
A detention basin contains different components, including inlet pipes (there may be one or multiple inlets), the side slopes and bottom, a low flow channel, the outlet structure, the outlet pipe, an embankment and emergency spillway, and rip rap that is usually placed around pipes where they enter and exit to prevent erosion.

Outlet structures vary from basin to basin, but all will include a minimum of two outlets - a small diameter outlet and a larger diameter overflow. Outlets may be covered by a trash rack or metal grate.



Basin Outlet Structure

Newer, more advanced detention basins may include a *forebay*, which is a settling pool located at the inlet to a basin, and is separated from the rest of the basin by a level dike. The purpose of the forebay is to collect sediment before it enters the main basin. By concentrating sediment in the forebay, it becomes much easier (and less expensive) to clean the sediment out. Some detention basins may also include a *micropool*, which is a small, shallow, permanent pool of water near the outlet designed to prevent re-suspension of sediment and clogging of the outlet.



BASINS

INTRODUCTION

Your detention basin is a storm water best management practice (BMP) designed to temporarily capture and hold storm water runoff during periods of heavy rain, and slowly release this flow over a period of one or two days so it minimizes flooding and streambank erosion problems downstream. They also help remove sediments from storm water runoff, which helps improve the quality of local streams. Like most other things, a detention basin may not function properly or it may fail prematurely if not properly maintained. Once a detention basin fails, it is often very expensive to correct.

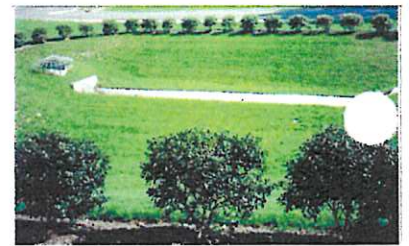


Many detention basins are located on private property, including parcels of land owned and maintained by a homeowners association (HOA). Local governments do not have the authority to maintain detention basins on private property. Rather, these are the responsibility of the lot owner to maintain.

Whether you are an individual property owner, a homeowner's association representative, or a residential/commercial property manager, this Guidebook will help answer questions and provide you with instructions for basin maintenance activities. Routine maintenance will prolong the life of your detention basin, improve its appearance, help prevent flooding and property damage, and enhance local streams and lakes.

WHAT ARE DETENTION BASINS AND WHY ARE THEY IMPORTANT?

When land is altered to build homes and other developments, the natural system of trees and plants over relatively spongy soil is replaced with harder surfaces like sidewalks, streets, decks, roofs, driveways and even lawns over compacted soils. As a result, less rain water soaks into the ground and more rain water, also known as storm water, flows off the land at a faster rate. This can lead to streambank erosion and possibly cause downstream flooding.



A detention basin is a man-made depression that collects and temporarily holds storm water runoff. Your detention basin (along with others in the area) helps to slow the rate of storm water runoff from the neighborhood and improve the quality of the storm water leaving the detention basin. Your detention basin is important because:

- it collects and detains storm water
- it helps settle out and hold sediment
- it protects local creeks and private property
- it reduces downstream flooding

There are different types of storm water management basins. Some basins are dry and have mowed turf grass in the bottom of them. These are referred to as dry detention basins, or simply detention basins. Others are designed to have a permanent pool of water and are commonly called wet ponds or retention basins. These wet ponds hold water throughout the year, but also have extra storage space that fills with water after a storm.

DRY BASIN



WET BASIN



VEGETATION MANAGEMENT



Vegetation should be maintained throughout the basin to prevent erosion, including the basin bottom, side slopes, and both sides of the dam. Turf grass is the most common groundcover, although other vegetation, such as deep-rooted native plants, can be used to improve basin performance by allowing more water to infiltrate (to soak into the soil). If something other than turf grass is used in the basin bottom, care should be taken to use plants that can withstand temporary inundation and wet soils as well as periods of extended dryness.

If vegetation in a basin is not managed, problems can result. To stay ahead of problems:

- In the spring and fall, inspect the vegetation along the side slopes and basin bottom.
- Re-seed any barren or eroded areas which have developed.
- Any small erosion gullies which have appeared should be completely filled with well-compacted soil, re-seeded, and monitored for recurrence.
- In the spring, remove decomposing vegetation if it is clogging pipe openings.
- Mow at least twice a year if turf grass is used as the groundcover in the basin to prevent trees and woody plants from becoming established. The basin may be mowed more frequently for aesthetic purposes. It is recommended that a grass height of 2 inches be maintained.

No trees or shrubs should be planted or allowed to grow within 15 feet of inlet or outlet pipes or manmade drainage structures such as spillways or earthen embankments. Plants with roots that seek water, such as willow or poplar, should not be used within 50 feet of pipes or manmade structures.

Once a year, the detention basin should be inspected for the appearance of invasive species, including honeysuckle, Callery pear, autumn olive, buckthorn (common & glossy), purple loosestrife and phragmites. Vines can also be a nuisance around the inlet and outlet structures.

Cattails



There are good and bad points about the common cattail. On the plus side, the common cattail (*Typha latifolia*) is a native species and is effective in removing excess nutrients from storm water runoff. On the down side, cattails have a tendency to invade and grow quickly, crowding out other desirable species. Many people also feel they are aesthetically unpleasing. If you choose to allow cattails to grow in the basin, there are some important things to keep in mind. Cattails should be kept clear of the outlet structure, as they can cause blockages. Cattails should also be kept away from the dam area. Cattails can encourage muskrats, and their burrows can affect the integrity of the dam. If you wish to eliminate the cattails in the future, it is important to note that cattails can be very difficult to remove, and special equipment may be needed.



CITY ORDINANCES AND CODE ENFORCEMENT

ARTICLE V. - CUTTING OF WEEDS AND VEGETATION

Sec. 118-126. - Weeds to be removed.

It shall be unlawful for any owner, agent, lessee, tenant, or other person occupying or having charge or control of any premises to permit weeds to remain upon said premises or any area between the property lines of said premises and the centerline of any adjacent street or alley, including, but not specifically limited to, sidewalks, streets, alleys, easements, rights-of-way and all other areas, public or private. All weeds as hereinafter defined are hereby declared a nuisance and are subject to abatement as hereinafter provided. More information concerning the code of ordinances is available at the city website.

<https://library.municode.com/ks/leavenworth>

BASIN

MAINTENANCE



A consistent maintenance program is the best way to ensure that a detention basin will continue to perform its water quality functions. In general, a maintenance program should contain the following components:

- Maintain access for inspection and maintenance;
- Regular inspections;
- Debris and litter control;
- Vegetation management;
- Embankment and outlet stabilization; and
- Sediment removal.

MAINTAINING YOUR DETENTION BASIN



The first step in a maintenance program is to obtain a copy of the detention basin design. Review the engineering design!

Basin Access

Insure that you have proper access to the basin for regular inspection and maintenance activities. Access should be wide enough for heavy equipment that may be needed for dredging or major repairs. Consider HOA prohibition against homeowners placing fences, outbuildings, landscaping or anything which might interfere with proper access.

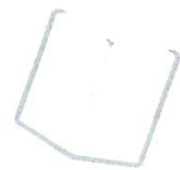
Record Keeping

It is important to keep records of all inspections, maintenance activities, repairs and associated costs.

Management Costs



An effective detention basin management program does come with costs, and detention basin owners should plan accordingly. The Center for Watershed Protection has estimated that the annual cost of routine maintenance is typically about 3 to 5% of the construction cost. With good record keeping, the owner can determine annual costs more accurately. Owners should set aside money for routine maintenance as well as the occasions when outside expertise or equipment is needed to maintain, upgrade or repair a basin.



Detention basin overflow weir



Basin inlet in background and outlet structure with trash rack in center, which has been helpful in preventing debris from being discharged.



Detention basin outlet structure; mowing here would be helpful

BASIN MANAGEMENT

WHAT CAN THE HOMEOWNER DO:

INDIVIDUAL PROPERTY MANAGEMENT WITHIN THE DRAINAGE AREA



There are many steps that property owners can take to ensure that the detention basin functions properly and to minimize long-term maintenance. A number of these activities are described below:

- Do not place yard waste such as leaves, grass clippings or brush in the detention pond, drainage ways, or in the storm drains located in the streets. Yard waste can block basin inlet and outlet pipes. This material also releases excess nutrients as it decomposes. Nutrients, such as nitrogen and phosphorus, are among the most significant pollutants of concern in local lakes and streams.
- Do not dump any materials, such as motor oil, into the storm sewer system. Improperly disposed of materials will pollute the basin. It is also illegal.
- Do not use unapproved or unnecessary amounts of pesticides, herbicides, or fertilizers. These products will wash from the basin into local streams and rivers. In addition, these chemicals can be harmful to the wildlife, such as bees, frogs, toads, fish, and dragonflies.
- If you use fertilizers, test your soil first to find out what nutrients are lacking, and apply only what is needed. Use low-phosphorus, slow-release varieties. Keep fertilizers on the lawn and not on paved areas. Fertilize after and not before a rain storm. Never fertilize when heavy rain is predicted
- Pick up and properly dispose of pet waste.
- Mow high, and avoid mowing directly to the edge of lakes and streams. Sweep grass clippings from sidewalks and curbs and either compost or bag. Do not hose off clippings from driveways and sidewalks into the storm sewer system. Grass clippings can get into the water and add excess nutrients as they break down.
- Educate your neighbors. Share information and management tips with them. If your community has a web site or social media page, post helpful tips on these.

SAMPLE INSPECTION SCHEDULE

Activity	Frequency
Inspect inlet/outlet pipes and spillway for debris, sediment accumulation or other blockages	Monthly and after major storms
Inspect side slopes for barren or eroded areas	Early spring and fall
Inspect/clear pond of debris, tree limbs, dead vegetation, etc.	Early spring, fall, and after major storms
Rip rap inspection, replace as needed	Early spring, fall, and after major storms
Check for standing pools of water, eliminate when found	Early spring, fall, and after major storms
Mowing	At least twice annually
Inspect inlet/outlet pipes for structural integrity	Annually*
Inspect safety-related structures (e.g., fences, gates) for defects	Annually
Inspect Integrity of Dam	Annually*
Inspect for invasive plant species	Annually
Inspect for sediment accumulation	Annually
Clean excess sediment from pond	When 6-12 inches has accumulated, roughly every 5-10 years.

REGULAR INSPECTIONS/MAINTENANCE:

THE KEY TO KEEPING A WELL MAINTAINED BASIN



The following maintenance and inspection tasks should be conducted for basin structures. Please also refer to the inspection schedule at the back of this Guidebook.

Monthly and after major storms:

- *Inspect for sediment, trash or other debris that may be blocking the inlet or outlet pipes, as well as the spillway.* Debris and sediment commonly clog detention basins and reduce the basin's overall effectiveness. Additionally, improperly maintained basins can harbor breeding areas for mosquitoes. Any sediment or debris found to be blocking the inlets or outlet structure, even partially, should be removed. Remove accumulated sediment with a shovel and wheelbarrow if it is blocking water flow. Small amounts of removed sediment can be spread evenly on upland areas and seeded. All trash and debris throughout the basin should also be removed.



Outlet structure blocked with sediment and debris

Early spring, fall and after major storms:

- *Inspect the entire basin for debris in early spring, fall, and after major storms.* If necessary, clear large limbs and other debris that may ultimately block the outlet structure. Dead vegetation should be raked out in early spring. If the spillway structure is frequently found to be clogged or partially clogged, debris within the basin area should be cleared on a more frequent basis.
- *Check for standing pools of water, especially in the low flow channel.* Eliminate these as they are found, either by filling in low spots and seeding, or by re-grading the problem area.

Twice a year and after major storms:

- *Inspect riprap at the inlet and outlet pipes.* Check for erosion around the pipe. Replace riprap when missing or clogged with sediment and debris.

Annually:

- *Inspect the inlet pipes and outlet pipe for structural integrity - check inlet/outlet pipes to ensure they aren't crumbling or broken. Do not enter any pipes to complete inspection (such as the outlet pipe under the embankment).* Many local contractors have camera equipment that can be used to inspect these pipes.
- *Inspect for excess sediment accumulation in the basin - Remove every 5-10 years or when 6-12 inches of sediment has accumulated.*
- *Inspect any safety-related structures, including fences and gates, for problems or defects. Correct as necessary.*

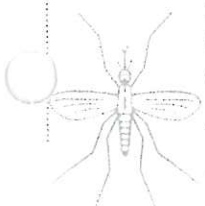
SEDIMENT REMOVAL

Excess silt and sediment can collect over time and reduce the storage capacity of the detention basin. In addition, sediment tends to collect around the outlet structure and may block the outlet. To prevent too much sediment from building up:

- Inspect the basin for sediment accumulation annually
- Remove excess sediment when six inches of sediment has accumulated in the basin, or approximately every 5-10 years.
- If the basin has a forebay, remove sediment when the forebay capacity has been decreased by 50%.

Sediment removal is fairly simple if access is available for the equipment. Front-end loaders or backhoes can be used to remove the accumulated sediment. Sediment removal should be done under the dry weather/dry soil conditions, otherwise, de-watering of the sediments might be necessary. Waste sediments are typically treated as uncontaminated soils and can be used as fill material; however, if soil is contaminated and deemed to be hazardous, it must be disposed of in a hazardous waste landfill.

MANAGING FOR MOSQUITOES



Mosquito problems may occur in detention basins that are not functioning properly and are not maintained. The best control technique is to ensure that stagnant pools of water do not develop. There are a variety of other things you can do to reduce the number of mosquitoes in your environment:

- Install bird houses or bat boxes near the basin.
- Cattails and bulrushes attract dragonflies and other mosquito-eating insects.
- Dense shrubs and brush often provide a habitat for birds and mosquito-eating insects.

Detention Basin Inspection

Basin Address and Location: _____

Owner Name and Address: _____

Inspection Date: _____

Inspected By: _____

	Y	N	N/A	Last Maintenance Date
Are inlet/outlet structures free of debris, trash, sediment, and leaves?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Repairs/Comments: _____

Is rip rap in place and free of sediment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
---	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Are embankments and structures free of trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
---	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Are embankments and structures damaged or eroded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
---	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is the facility mowed and free of trash?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is there excess sediment in the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is the trickle channel damaged by erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is the out flow of water causing damage to adjacent property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
---	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is there exposed soil with no vegetation growing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
---	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is the facility draining properly according to as built plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

BMP 5

Colette Kiszka

From: Mike McDonald
Sent: Thursday, August 09, 2018 8:12 AM
To: Paul Kramer
Cc: Mike Hooper; Michael Stephan; Colette Kiszka; Taylour Tedder
Subject: City Contacting People - Erosion Control and Detention Ponds

Our office has been inspecting and contacting people and businesses that have permits that require us to inspect them periodically. This is erosion control permits and detention basins mostly. This includes USD453 and Reilly Homes.

We are being nice, but you may get a call or two as we go along. If you can direct them to talk with Mike Stephan or Mike Hooper (913-684-0375) that would be entirely appropriate.

Mike

Michael G. McDonald, PE

Director of Public Works
City of Leavenworth
100 N Fifth Street
Leavenworth, KS 66048
mmcdonald@firstcity.org
913-684-0375

Appendix D (Continued)

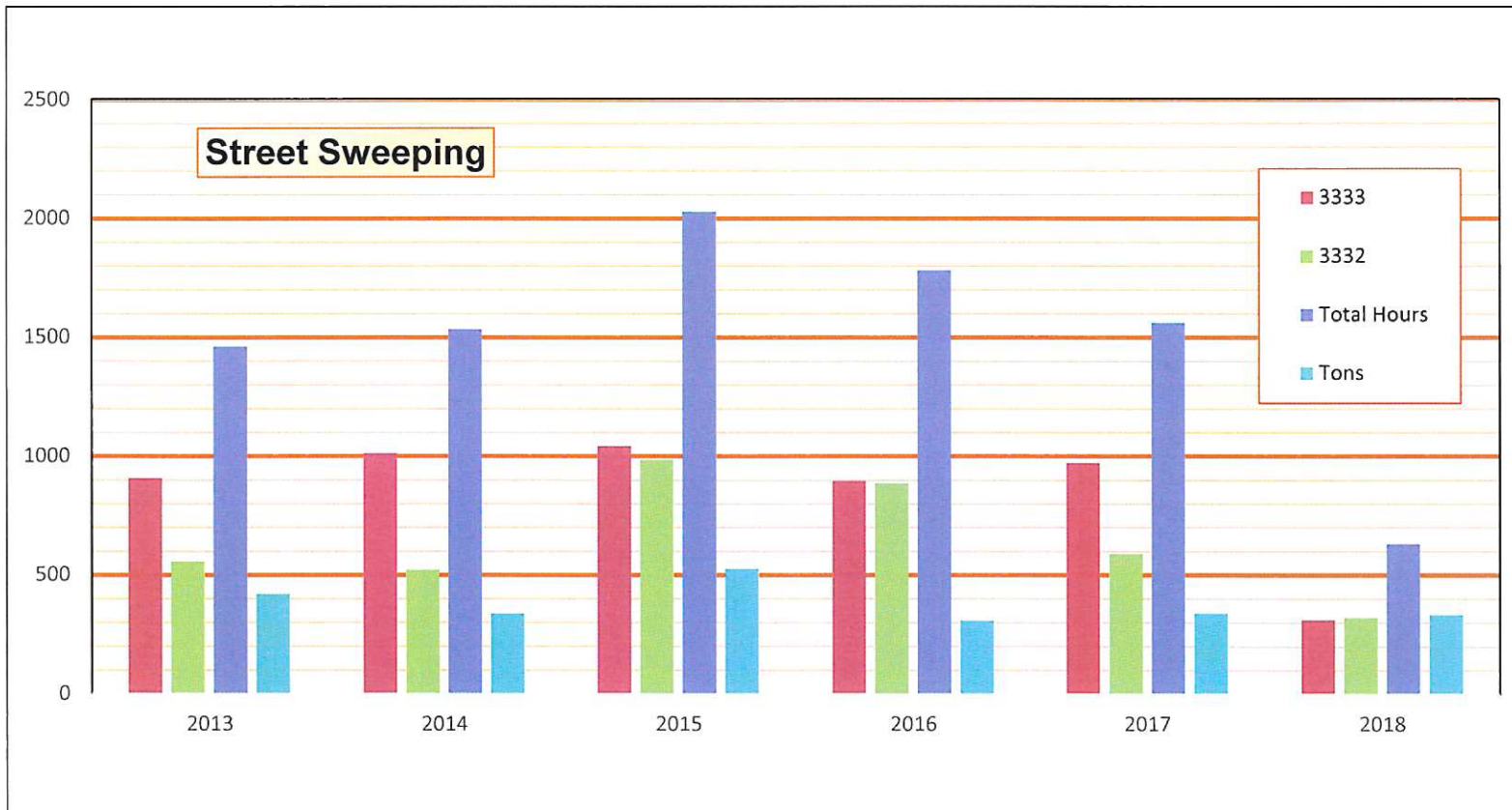
Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report – Section E) (BMP Number 6)

BMP 6 – Municipal Pollution Prevention/Housekeeping

Note: City created stormwater utility with fee in 2018 (documents are in BMP 1 & BMP 2)

- Street Sweeping
- Salt Use
- Leaf Pick Up SSO from Private Lines and Homes
- First Stormwater Project from Utility Fee
- New Lot at 6th & Cherokee with Water Quality Feature

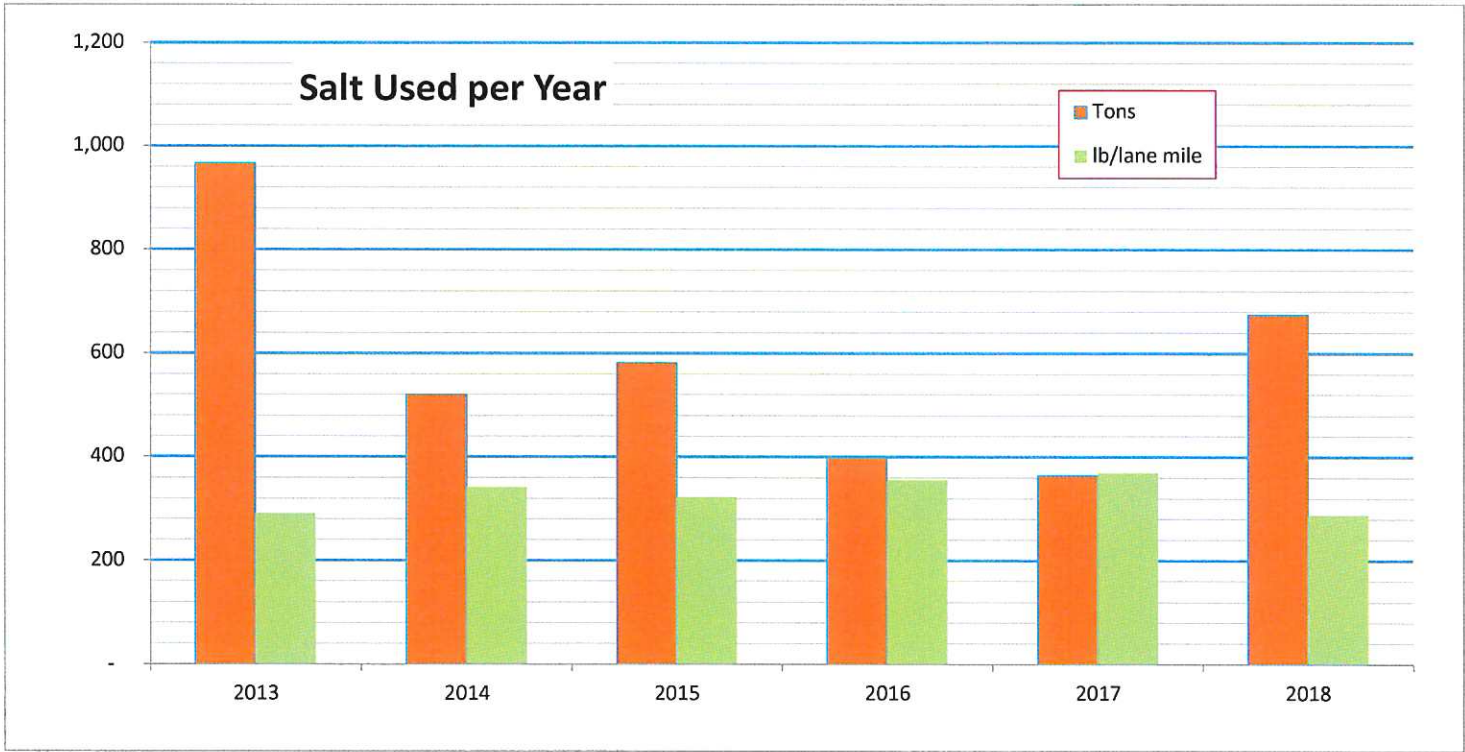
Street Sweeping				
Year	Hours/Vehicle		Total Hours	Tons
	3333	3332		
2013	907	555	1,462	418.91
2014	1,012	522	1,534	338.28
2015	1,043	985	2,028	525.29
2016	896	886	1,782	308.46
2017	972	589	1,561	338
2018	311	320	631	333.84



City of Leavenworth

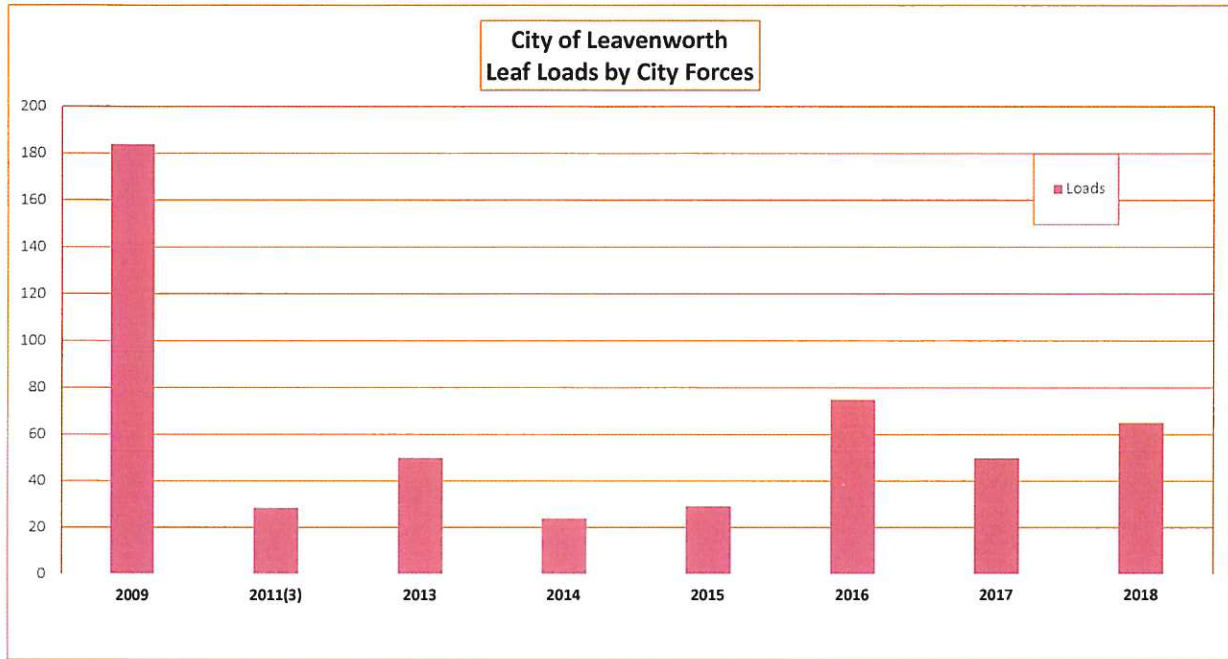
February 12, 2019

Salt Used		
Year	Tons	lb/lane mile
2013	967	291
2014	520	342
2015	582	323
2016	398	356
2017	364	370
2018	675	289



City of Leavenworth Leaf Pick Up (City Forces)

Year	Loads
2009	184
2011(3)	28.5
2013	50
2014	24
2015	29.25
2016	75
2017	50
2018	65



Note:
(1) City began a leaf collection program in 2008 with new equipment. All of the City was picked up in 2008 and 2009. The program was changed to pick up only half of the City. Quantities were impacted by weather in 2014 and 2015.
(2) This chart shows loads. There was some inconsistency in the early years of the program with how loads were determined.
(3) Records for 2010 - 2012 are incomplete.

BMP 6

Colette Kiszka

From: Wendy Hall
Sent: Wednesday, May 09, 2018 1:53 PM
To: Mike McDonald
Cc: Colette Kiszka
Subject: FW: Updated Snow Event
Attachments: Snow Events Winter 2017 - 2018 040318.xls

Now that we are in May, I'm hoping it is safe to send this. If it snows tomorrow, we'll know why. Please let me know if you need any additional information.

Have a great afternoon!

Wendy Hall
Administrative Clerk – Streets
Municipal Service Center
913-758-6602

WINTER 2017-2018
SNOW/ICE EVENTS

<u>Date</u>	<u>EQUIPMENT HOURS</u>	<u>REGULAR HOURS</u>	<u>OVERTIME HOURS</u>	<u>TONS OF SALT/SAND</u>	<u>POUNDS PER LANE MILE</u>	<u>TREATING MILEAGE</u>	<u>PLOWING MILEAGE</u>
12/24/17	90.25	63.25	63.00	64.85	223.47	580.40	0.00
12/26/17	90.75	77.25	28.25	107.20	407.60	526.00	0.00
01/07/18	20.00	24.00	0.00	28.60	307.53	186.00	0.00
01/11/18	110.00	91.00	37.50	116.31	293.27	793.20	0.00
01/13/18	211.50	104.00	138.50	82.69	166.96	990.50	625.50
01/22/18	18.00	12.00	9.00	22.34	296.29	150.80	0.00
02/04/18	87.25	33.00	64.25	96.70	414.31	466.80	0.00
02/10/18	18.00	0.00	25.50	25.74	338.46	152.10	0.00
02/20/18	236.25	136.75	113.50	141.54	416.60	679.50	663.20
04/01/18	80.50	0.00	87.50	74.46	402.05	370.40	0.00

Colette Kiszka

From: Kayla Manning <kmanning@lvnwater.org>
Sent: Friday, April 13, 2018 3:35 PM
To: Mike McDonald; Joel Mahnken
Cc: Hal Burdette; Mark Kramer; Colette Kiszka; Carla Williamson; Paul Kramer
Subject: RE: Sewer Overflow Issue - 733 Pawnee

Ok

From: Mike McDonald [mailto:MMcDonald@firstcity.org]
Sent: Friday, April 13, 2018 3:34 PM
To: Kayla Manning <kmanning@lvnwater.org>; Joel Mahnken <JMahnken@lvnwater.org>
Cc: Hal Burdette <HBurdette@firstcity.org>; Mark Kramer <mkramer@firstcity.org>; Colette Kiszka <ckiszka@firstcity.org>; Carla Williamson <cwilliamson@firstcity.org>; Paul Kramer <pkramer@firstcity.org>
Subject: FW: Sewer Overflow Issue - 733 Pawnee
Importance: High

Kayla/Joel –

Please arrange to have the water shut off at this address today – **733 Pawnee Street** to prevent further sewer overflows and contamination of the stormwater system

Mike

Michael G. McDonald, PE

Director of Public Works
City of Leavenworth
100 N Fifth Street
Leavenworth, KS 66048
mmcdonald@firstcity.org
913-684-0375

From: Mike McDonald
Sent: Friday, April 13, 2018 3:14 PM
To: Hal Burdette
Subject: FW: Sewer Overflow Issue - 733 Pawnee
Importance: High

From: Mike McDonald
Sent: Friday, April 13, 2018 3:07 PM
To: Paul Kramer
Cc: Taylour Tedder
Subject: Sewer Overflow Issue - 733 Pawnee
Importance: High

Paul – we have dealing with this for a couple of days. Cannot find a name or phone for owner, only a PO Box in Lansing.

Tenant is not a lot of help

The water should be shut off today (pretty quick) to prevent further SSO events until a plumber is on the job.

Mike

From: Hal Burdette
Sent: Friday, April 13, 2018 3:02 PM
To: Mike McDonald
Cc: Mark Kramer
Subject: 733 Pawnee

Mike,

Mark Kramer reports that he is not having any luck getting any contact information for ownership from the tenant at 733 Pawnee where there is a sanitary sewer issue that is surfacing in the rear yard. Mark and I suggest that water be disconnected to stop the flow from continuing until repairs are completed, or we at least know of a plumbing contractor who will be addressing the issue.

Hal Burdette
Chief Building Inspector
City of Leavenworth
100 N. 5th St.
Leavenworth, KS 66048
913-684-0378

***The message and documents transmitted with this e-mail contain confidential or privileged information belonging to the sender and it is intended only for the individual or entity to whom it is addressed. Unauthorized use of this communication is strictly prohibited and may be unlawful. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message and any attachments. ***

**Re: Stormwater Improvement Project
3118 Iowa Street
Leavenworth, Kansas**

The above was the first project using funds from the Stormwater Fee. The project resulted from reported "sinkholes" in the resident's yard. It was identified that the "sinkholes" were due to a rusted out CMP. A Request for Proposal was sent out to area contractors.

The Proposal included:

1. Remove/Replace the existing 30" CMP to include all labor and materials and necessary work in the inlets required to install the new pipe (Approximately 90 LF).
2. Remove the existing trees and brush around the outlet/end section at the west end of the pipe.
3. Install 100 CY of 250 lb. Rip Rap at pipe outlet/end section.
4. Remove/Replace existing landscape plantings as necessary.
5. Re-grade and seed the disturbed area as necessary to include erosion control. The site will be required to have 70% cover prior to releasing the LDP.

The project was completed in a few days, thus resolving a stormwater deficiency.

3118 Iowa, Leavenworth, KS

December 4, 2018



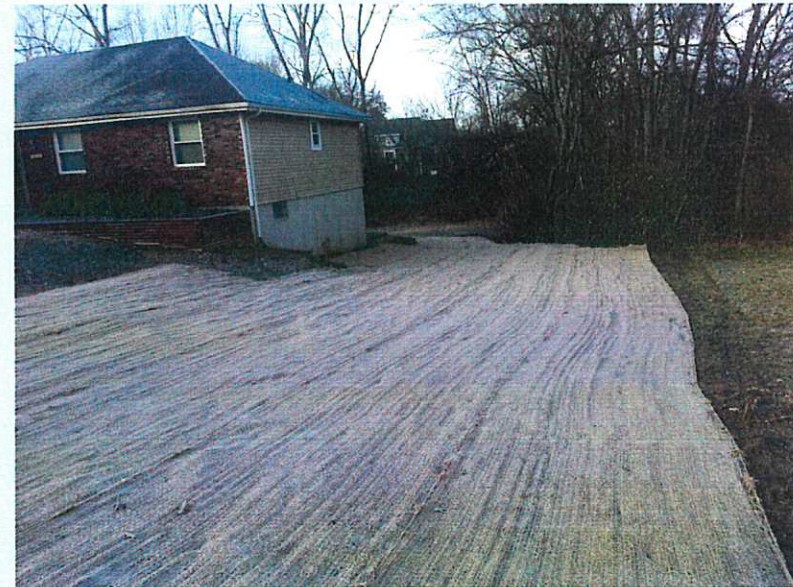
3118 Iowa, Leavenworth, KS

December 4, 2018



3118 Iowa, Leavenworth, KS

December 12, 2018



**Re: 2018 Stormwater Improvement Project
City Parking lot at 6th and Cherokee
Leavenworth, Kansas**

The above was a rehabilitation project of the City Parking Lot at 6th and Cherokee. In designing new curbs and pavement for this lot, stormwater improvements were also added.

The Proposal included:

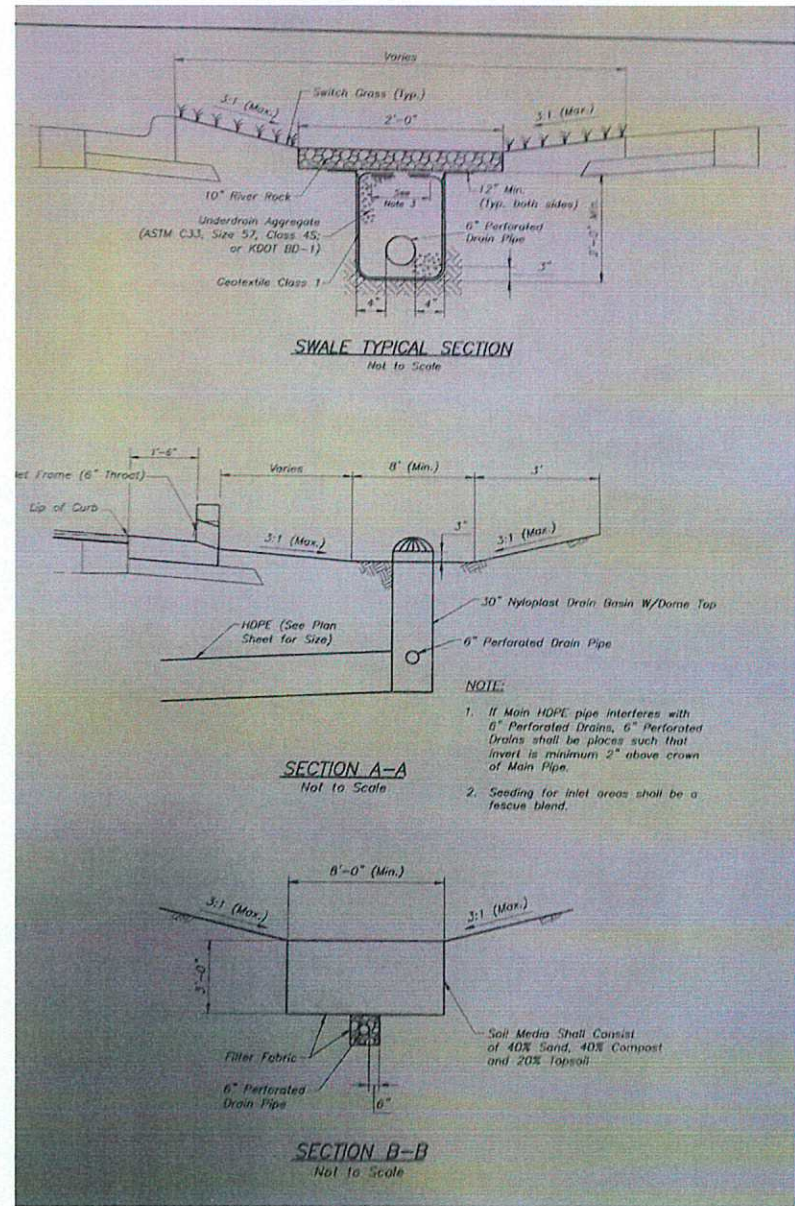
1. Resurfacing the Parking Lot.
2. Correcting some drainage issues.
3. Construction of underdrain bioswale to catch parking lot runoff.
4. The curb was left out along the east side of the swales to better catch runoff.
5. For water quality, river rock and plantings were used in the swales.

The project was mostly constructed in 2018, however, due to winter weather conditions the project was shut down and the final swale improvements are to be constructed Spring of 2019. To control erosion through the winter, the bare areas were covered with an erosion control blanket. The final improvements include installation of the special soil media at the dome grate inlets, river rock, plantings, and final seeding.

City Parking Lot at 6th & Cherokee, Leavenworth, Kansas (2018)



City Parking Lot at 6th & Cherokee, Leavenworth, Kansas (2018)



Appendix D (Continued)
Selected Supporting Documentation for
Stormwater Management Program
(Stormwater Annual Report – Section E)
(BMP 7)

N/A for City of Leavenworth

Appendix E

Map Showing Stormwater System and Outfalls

A DVD containing the current Map of the City showing creeks, streams, inlets, outlets, outfalls and other stormwater-related information in PDF format will be mailed with the annual report to Rance Walker of KDHE on or before February 28, 2019.

GIS Department



Welcome to the City of Leavenworth GIS Department!

[Click here to access the full City GIS Web Application](#)

GIS stands for Geographic Information Systems...

- **Geography** refers to anything that can be located in physical space, but primarily those features that exist on the earth's surface.
- **Information Systems** refers a computer-based technology that stores, retrieves, edits, analyzes and publishes geographic information.

What does the City's GIS contain?

- The City's GIS contains over 80 databases of information about the infrastructure owned by, cared for, or otherwise relates to the City of Leavenworth. That includes addresses, 911 information, buildings, streets, boundaries, properties, zoning, subdivisions, hydrological data about creeks and the Missouri River, asset inventory, utilities like stormwater, sanitary sewer and water features, also topography, census data and much more.
- It also serves many of the City's departments by providing maps and websites for the 911 system, police and fire dispatch, police and fire vehicles, trash pickup, snow removal, sidewalk planning, sign inventory and more.

The current City mapping can be viewed online by searching for

LVKS GIS

and selecting "Click here to access the full City GIS Web Application" from the results, and following one of the Links, or directly accessing the following address:

<http://www.lvks.org/department/division.php?structureid=139>