

LEAVENWORTH WATER DEPARTMENT

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS

HELD ON JANUARY 28, 2013

A regular meeting of the Board of Directors of the Leavenworth Water Department was held at 5:00 PM on Monday, January 28, 2013 at the Leavenworth Water Department located at 601 Cherokee, Leavenworth, Kansas 66048.

ATTENDANCE

Directors in Attendance

Howard Kirk, Chairman
Thomas Koch, Vice Chairman
Dr. Paul Kittle, Assistant Secretary
Michael Bogner, Secretary
Teresa Wood, Member

Directors Absent (Excused)

Staff in Attendance

John Kaufman, Department Manager
Lesia Hegeman, Finance Manager
Dennis Baragary, Sr., Distribution Manager
Patrick Garrett, Jr., Distribution Supervisor
Jeff Arnold, Plant Superintendent
James Adams, North Plant Superintendent
Gary Simanowitz, South Plant Superintendent

Others in Attendance

None

CALL TO ORDER

Chairman Kirk called the meeting to order noting that a quorum was present.

MINUTES

Upon motion of Director Wood, seconded by Director Koch the minutes were adopted, it was ...

RESOLVED (No. 14130), that the minutes of the January 14, 2013 Board Meeting are hereby approved.

PUBLIC COMMENT

None

BOARD MEMBER ITEMS

Director Koch commented that he recently received unspecified complaints about the Water Department from City staff.

CONSIDERATION OF
PAYROLL
DISBURSEMENTS

Upon motion of Director Kittle, seconded by Director Bogner, and unanimously adopted, it was ...

RESOLVED (No. 14131), that the regular payroll for the period ending January 31, 2012 amounting to gross pay of \$75,545.81 (composed of Federal Tax Withheld - \$8,011.24; FICA Withheld - \$5,549.94; State Tax Withheld - \$2,623.42; KPERS Withheld - \$3,230.62; P.E.D.C. - \$1,939.83; Insurance - \$2,446.67; United Way - \$90.50; EQ-Flex - \$2,470.04; Misc. - \$260.00; Direct Deposits - \$48,923.55, and including the following overtime amounts: Distribution – 31.50 hours @ \$1,022.81, North Plant – 33.50 hours @ \$934.56 and South Plant – 28 hours @ \$886.08 be approved and disbursements made from the Revenue Fund for their respective amounts.

CONSIDERATION OF
REGULAR CLAIMS

None

CONSIDERATION OF
SPECIAL CLAIMS

Upon motion of Director Wood, seconded by Director Kirk, and unanimously adopted, it was ...

RESOLVED (No. 14132), that the Board approved the Special Claims on the Revenue fund totaling \$209,964.32, and the checks be drawn on the Revenue Fund for their respective amounts.

CONSIDERATION OF
SPECIAL/SPECIAL
CLAIMS

Upon motion of Director Kittle, seconded by Director Wood, and unanimously adopted, it was ...

RESOLVED (No. 14133), that the Board approved the Special/Special Claims on the Revenue fund as follows Airgas \$175.41, Cheryl Hanback Consulting \$148.75, Leavenworth County Development \$500.00, Mike Rayser \$5,600.58, Deffenbaugh \$477.03, Kansas Gas Service \$2,309.24, Computers, Networks Support \$674.99, SASI \$661.91, and Computers, Network Support \$454.99 that checks be drawn on the Revenue Fund for their respective amounts.

CONSIDERATION OF
FINANCIAL AND
INVESTMENT REPORT

Upon motion of Director Koch, seconded by Director Bogner, and unanimously adopted, it was ...

RESOLVED (No. 14134), that the Board approved December 2012 Financial Statements.

ADMINISTRATION
UPDATES

HR Update

There is nothing new to report at this time.

Staff Engineer Resumes and Interviews

A resume was received from a qualified engineer. More about the candidate was sent to the board separately.

Office Renovation

The door between the staff engineer and general manager's offices was removed and replaced with drywall.

PROJECT UPDATES

Stage 2 Disinfection Byproduct Study

EPA's Stage 2 Disinfection Byproduct (DBP) rule is one part of the Microbial and Disinfection Byproducts Rules (MDBPs), which are a set of interrelated regulations that address risks from microbial pathogens and disinfectants/disinfection byproducts. The Stage 2 DBP rule focuses on public health protection by limiting exposure to DBPs, specifically total trihalomethanes (TTHM) and five haloacetic acids (HAA5), which can form in water through disinfectants used to control microbial pathogens. This rule applies to all community water systems and nontransient, noncommunity water systems that add a primary or residual disinfectant other than ultraviolet (UV) light or deliver water that has been disinfected by a primary or residual disinfectant other than UV.

According to EPA, disinfectants like chlorine can react with naturally-occurring organic matter in the water to form byproducts such as THM, HAA5, chlorite, and bromate. These byproducts, if consumed in excess of EPA's standard over many years, may lead to increased health risks. The Water Department uses chloramines (chlorine gas and ammonia) to disinfect the public water supply following filtration at the treatment plants. This disinfection process reduces the formation of disinfection byproducts and was implemented at the two treatment plants to comply with the Stage 1 DBP rule.

The Stage 2 DBP rule also requires each water-supply system to determine if they have exceeded an operational evaluation level, which is identified using their compliance monitoring results. The operational evaluation level provides an early warning of possible future MCL violations, which allows the system to take proactive steps to remain in compliance. A system that exceeds an operational evaluation level is required to review their operational practices and submit a report to their state that identifies actions that may be taken to mitigate future high DBP levels, particularly those that may jeopardize their compliance with the DBP MCLs.

Compliance monitoring under the Stage 2 rule for the Water Department begins on October 1, 2013. EPA published the Stage 1 and Stage 2 Disinfectants/Disinfection Byproducts Rule to regulate HAA5 at 60 parts per billion (ppb) annual average. EPA published the Stage 1 and Stage 2 Disinfectants/Disinfection Byproducts Rule to regulate TTHM at a maximum allowable annual average level of 80 ppb. Compliance with the maximum contaminant levels for the two key groups of disinfection byproducts (TTHM and HAA5) will be calculated for each of four monitoring locations in the City distribution system. This approach, referred to as the locational running-annual average (LRAA), differs from Stage 1 requirements, which determine compliance by calculating the running annual average of samples from all monitoring locations across the system.

Staff met with Black and Veatch engineers on January 15th to discuss the findings of their assessment of the Water Department's disinfection byproduct data. The historic data show that the South Plant does not have a disinfection by-product concern because the water source is ground water and the post-filter disinfection system is working effectively. The historic data for the North Plant also show that the treatment plant has also been in compliance with the new Stage 2 disinfection byproduct rule, even though the water source is the Missouri River and recent water demands have been high.

However, during the period of snow melt and rainfall runoff (usually in May), the dissolved and colloidal organic content in the Missouri River is typically high, accentuating the opportunity to form disinfection byproducts, particularly TTHMs, during the water disinfection process at the North Plant. Some TTHM data associated with the North Plant during this period has exceeded 80% of the 80 ppb standard. At least one water sample even exceeded the 80 PPB limit when water production from the North Plant was high; but, the computed averages never exceeded the Stage 2 compliance standard.

Black and Veatch suggested that during the spring runoff (mostly the month of May), the pH of the water during lime softening at the North Plant be increased to about 11.3 to remove dissolved magnesium bicarbonate, because magnesium hardness removal tends to significantly reduce dissolved organics that can form TTHMs. This will require additional use of lime during this period. The North Plant will increase the use of lime in May 2013 as a test to remove magnesium carbonate and monitor the level of TTHM production. The ongoing drought in the Missouri River Basin may reduce the runoff and organic levels in the river in May, which could affect the test results. If the increased lime softening in May fails to reduce the TTHM level, then dye-testing and modeling the chlorine contact basin may be considered as a second step to determine if short-circuiting occurs during periods of high demand. Black and Veatch will prepare a draft report of their initial findings and recommendations for consideration by the Water Department.

Server

A new Dell server was installed on Friday, January 25th and will be monitored over the next couple of weeks in tandem with the existing server to ensure it is operating properly. The new server should resolve problems with scanner.

North Plant Head Gates

The North Plant head gates will be installed in February (or March if necessary). The installation was postponed for more than a year due to the 2011 flood. The gates were delivered to the North Plant about a year ago. Midland Contractors, Inc. was awarded the contract in the amount of \$119,300.00 and has requested a contact modification of \$5,000 to cover increased labor costs. The project cost will be \$124,300. Jeff Arnold and I believe this is a reasonable request and recommend approval.

Plant Security Gates

New security gates were installed at the two treatment plants and will become fully operational when the electrical work is completed.

Other Projects

The status of other projects is summarized below.

| Main Replacements | Project Status |
|---|--|
| <ul style="list-style-type: none"> Shawnee Street (from Esplanade to 6th Street) and Esplanade (from Shawnee to Delaware) | The project will resume when the weather warms. |
| <ul style="list-style-type: none"> Delaware Street (from 13th Street to 16th Street) | The project will begin in the spring or summer. |
| <ul style="list-style-type: none"> 16th Street (from Santa Fe to Thornton Street) | The project will begin in the spring or summer. |
| <ul style="list-style-type: none"> Miami Street (from 8th Street to 10th Street) | The project will begin in the spring or summer. |
| <ul style="list-style-type: none"> Franklin Street (from Ohio to Kansas) | The project will begin in the spring or summer. |
| <ul style="list-style-type: none"> 3rd Street at Three-Mile Creek | The project will begin in the spring or summer. |
| <ul style="list-style-type: none"> 17th and Thornton 6-Inch Water Main | The project will begin in the spring or summer. |
| <ul style="list-style-type: none"> Stove Factory Lofts Water Mains and Hydrants | There is no project schedule. |
| City Road and Bridge Projects | Project Status |
| <ul style="list-style-type: none"> 2nd Avenue and Limit Street Bridge Replacement and Road Realignment | A draft KDOT 1304 form was prepared and submitted to the City for comment. |
| <ul style="list-style-type: none"> Limit Street Bridge Replacement at 15th Street | City condemnation of private land is pending. |

- and Road Widening from 15th to 20th Street
- 2nd Street Bridge Replacement EPA/KDHE approval of the construction work is pending due to contaminated soil.
- Storm Sewer Upgrade, Curb, and Sidewalk 2nd Street Bridge Replacement from 13th St. Terrace to 17th Street Nothing to report at this time.
- City Sidewalk and Street Overlay Projects Nothing to report at this time.

| Other Projects | Project Status |
|--|---|
| <ul style="list-style-type: none"> • Radio-Read Meter Installations | Delivery of about half of the meters is anticipated in March. |

CONSIDERATION OF 2013 CITY BILLING COST SHARE
 Upon motion of Director Bogner, seconded by Director Wood and unanimously adopted, it was ...
RESOLVED (No. 14135), that the Board approved the 2013 City Billing cost share at \$16,258.54 per month.

CONSIDERATION OF UNIVERSITY OF SAINT MARY SPIREFEST REQUEST
 Upon motion of Director Bogner, seconded by Director Koch, and unanimously adopted, it was ...
RESOLVED (No. 14136), that the Board approved to contribute \$1,500.00 from the Tower Fund to support Saint Mary's 2013 SpireFest.

CONSIDERATION OF COST TO LOWER EXTERIOR SUBMERSIBLE FLYGT PUMP AT INTAKE
 Upon motion of Director Bogner, seconded by Director Kirk, and unanimously adopted, it was ...
RESOLVED (No. 14137), that the Board approved Douglas Pump Service's proposal to lower the west exterior submersible Flygt pump at the intake about 18 inches at a cost not to exceed \$5000.00.

CONSIDERATION OF AMENDMENT TO MIDLAND CONTRACTORS CONTRACT
 Upon motion of Director Bogner, seconded by Director Koch, and unanimously adopted, it was ...
RESOLVED (No. 14138), that the Board approved a contract amendment of \$5,000.00 for Midland Contractors to cover increased labor expenses since the contract was awarded in 2011. The new contract amount is \$124,300.00.

CONSIDERATION OF ADDITIONAL FUNDING REQUEST FOR MISSOURI RIVER DEGRADATION STUDY
 Upon motion of Director Kirk, seconded by Director Kittle, and unanimously adopted, it was ...
RESOLVED (No. 14139), that the Board shall decline a \$5,000 additional funding request from the Mid-America Regional Council to complete the Corps of Engineers Missouri River Degradation study.

CONSIDERATION OF 2013
EMPLOYEE
COMPENSATION
PACKAGE

Action on this agenda item was tabled until the next Board meeting pending an analysis of the financial impacts of the various options to be considered.

MANAGER'S REPORT

Missouri River Flood Study

In September 2012, the Kansas City District of the U. S. Army Corps of Engineers "Silver Jackets" program began a pilot project to assist the State Emergency Management agencies in Kansas and Missouri and emergency managers with communicating more about the flood hazards to stakeholders along the Missouri River. The scope of the work for the pilot project is to develop the follow two products to improve the public's understanding of flood risks, not limited to the regulatory flood maps:

- **PROCESS.** A consistent process for flood inundation mapping, which will create maps that follow uniform hydrologic, hydraulic, and cartographic processes as Missouri River maps up and downstream. The process can be followed under future funding opportunities to address the remainder of the Missouri River.
- **PROTOYPE MAPPING.** The project is intended to produce a map book showing inundation at different flows or discrete river stages covering several flood scenarios for a reach of the Missouri River. The pilot reach covers 21 miles between Leavenworth, Kansas and Parkville, Missouri and includes part of the Platte River.

The Corps is seeking feedback on the following questions related to the product and the process to develop it:

1. Which association is more useful, inundation tied to river stage or tied to flow?
2. Which agency should be the repository for the flood information – RRS feeds, USGS, NOAA, NWS, USACE, TV, universities, or other?
3. How should inundation behind levees be communicated?
4. Should historic levee overtopping or failure records be used in conjunction with modeled results?
5. How should storage effects of the floodplain be accounted for?
6. At what scale should mapping products be displayed? (Maps may be displayed through a web viewer.)
7. How should inundation be broken into reaches based on gage locations?
8. Which levees should be displayed? (USACE, FEMA database, specific protection levels, etc.)
9. How will the limit of study be appropriately displayed?
10. How will uncertainties of contributing tributary inflows be handled?

The Water Department will provide feedback to these questions, which is due by Feb. 8th.

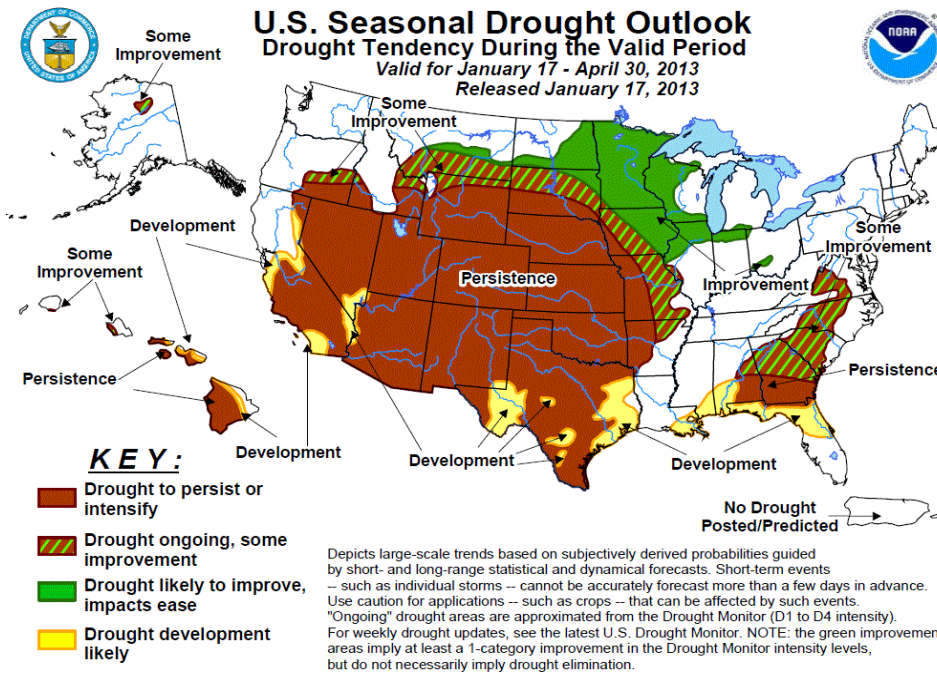
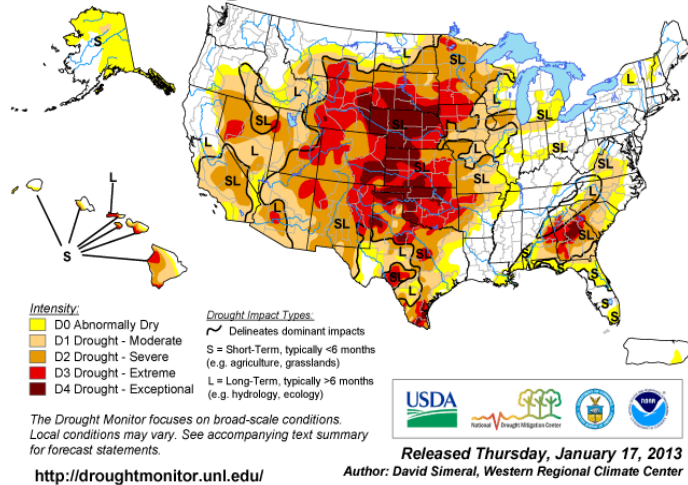
The Silver Jackets is an innovative program that provides an opportunity to consistently bring together multiple state, federal, and sometimes tribal and local agencies to learn from one another and apply their knowledge to reduce risk. State agencies, including those of the State Hazard Mitigation Officer and State NFIP Coordinator, come together with the Federal family of agencies, including the U.S. Army Corps of Engineers and the Federal Emergency Management Agency (FEMA), in a common forum to address the state's flood risk management priorities. Silver Jacket programs are developed at the state level. There are currently 33 active state teams; the ultimate goal is to offer an interagency team in every state. The stated program goals are to:

- Create or supplement a mechanism to collaboratively identify, prioritize, and address risk management issues and implement solutions;
- Increase and improve risk communication through a unified interagency effort;
- Leverage information and resources and provide access to such national programs as FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program and USACE's Levee Inventory and Assessment Initiative;
- Provide focused, coordinated hazard mitigation assistance in implementing high-priority actions such as those identified by state mitigation plans; and
- Identify gaps among agency programs and/or barriers to implementation, such as conflicting agency policies or authorities, and provide recommendations for addressing these issues.

Missouri River Drought Forecast

John Kaufman attended a recent webinar with the NOAA on the ongoing Midwest drought. According to NOAA, conditions have improved in the eastern half of the Corn Belt, but there has been little or no recovery in the plains states. NOAA forecasts colder and wetter conditions in the upper Plains in February. Over the next three months, the Dakotas and Montana are forecast to be colder and Colorado and Kansas will likely be warmer.

U.S. Drought Monitor January 15, 2013
Valid 7 a.m. EST



Letter to Region 7 EPA Concerning NPDES Permits for Lime Residuals

With Tom Shremp of Water One, John Kaufman helped draft a letter to the Region 7 EPA Administrator, Karl Brooks, from the Missouri River Public Water Supply Association (MRPWSA)

concerning EPA's NPDES permitting policy for Missouri River Water Treatment Plants. A copy of the letter is attached. The letter requests a meeting with the Administrator to discuss EPA's policy about the discharge of lime residuals into the Missouri River.

Missouri River Degradation Study

The ongoing Missouri River Degradation Study was recently re-scoped by the Corps. The major changes include a study timeline reduction of one year and cost reductions of about \$2M. To meet this objective, the Corps needs to dedicate more staff to the project and stakeholders are being asked to expedite contributions for Year 3, but there are no commitments to match the full amount. The Corps is also requesting that stakeholders contribute additional funds in early 2013. As per the attached letter, MARC is proposing that the Water Department contribute an additional \$5,000 to complete the project.

KRWA Article

John Kaufman authored a brief article on the Water Department's success with pipe bursting for publication in a future KRWA monthly Kansas Lifeline.

VA Water Service

The VA recently determined that it should establish an additional service connection with the Water Department along K-5 east of 4th Street. Management is working with the VA's consultant, Jünk Architects, to accomplish this task.

CCR Alternative Delivery

Sue Barnes attended a recent webinar on the EPA changes to the Consumer Confidence Report (CCR) requirements. Even though the reports can be made available to customers electronically, EPA is recommending that water providers "poll" their customers to determine how each customer would like to receive the CCR.

Water Conservation Plan

Because we will be reviewing our water conservation plan in April, the State Water Office sent us a draft generic template that we can use in our review. A copy of the draft template is attached along with a draft city ordinance.

City Billing for Sewer and Trash

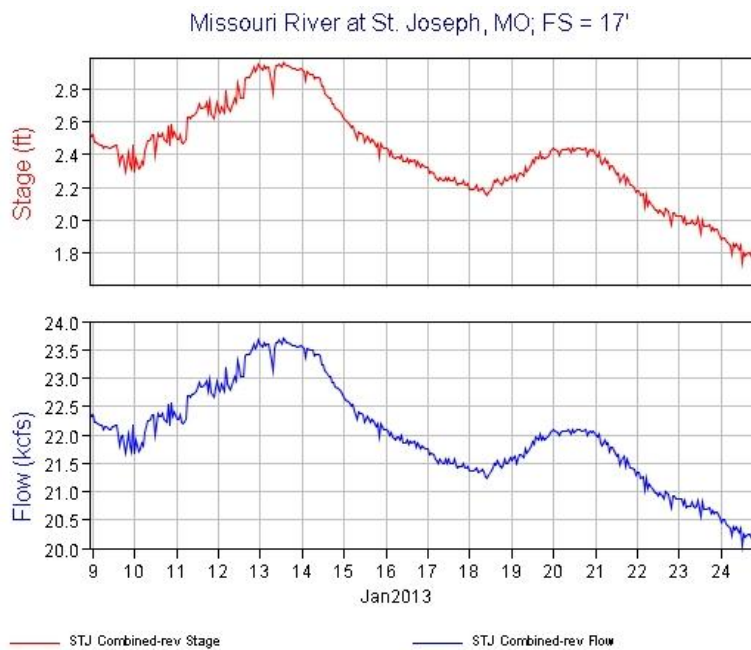
Lesia Hegeman and John Kaufman met with Mike McDonald and other representatives of the Public Works Department to discuss sewer and trash billing. The City plans to perform an audit of addresses and accounts to ensure every customer is being properly charged. Due to the recent sewer rate increase, the Water Department two inquiries for separate metering for cooling tower and irrigation water use. More will be discussed during the Board meeting.

Water Treatment Plant Operations

During the first 23 days month of January 2013, a total of 96,196,100 gallons were pumped into the water-distribution system from both treatment plants. Demand ranged from about 3.66 MDG to 4.74 MGD and averaged 4.18 MGD.

- a. **North Plant:** During the first 23 days month of January 2013, the North Plant produced 48,492,000 gallons and met about 50% of the total system demand by producing from 2.07 to 2.15 MGD and averaging about 2.11 MGD. The new head gates for the north plant will be installed in February or March.
- b. **South Plant:** During the first 23 days month of January 2013, the South Plant produced 47,704,100 gallons and met about 50% of the total system demand by producing from 1.55 to 2.64 MGD and averaging more than 2.07 MGD.

The flow in the Missouri River Leavenworth has declined since January 14th even though the discharge from Gavins Point has remained constant. This indicates that the baseflow from downstream tributaries into the Missouri River has declined nearly 2,750 cfs since January 14th. The flow at Leavenworth is currently about 20,250 cfs based on the hydrographs here. A meeting planned on Monday, January 28th with Douglas Pump to discuss options and action plans to ensure water flow to the North Plant.



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Water Distribution Operations

Since the previous Board meeting on January 14, 2013 the following water-distribution activities occurred:

- a. New Water-Service Connections: one at 2408 Shenandoah Dr
- b. Service Kills, Relocations or Repairs: one near 4th and Middle
- c. Valves and Fire Hydrants (new and replacements): none
- d. Waterline Breaks: 6 total, plus a leak on a 1-inch service line at 16th and Cherokee

| 2-inch (15) | 4-inch (2) | 6-inch (2) | 8-inch (1) | 10-inch (1) | 12-inch (1) |
|--|------------|--------------|------------|-------------|-------------|
| 2200 Girard 1308 Columbia 1414 Sander 1314 Pawnee 1322 Olive | none | 775 Cherokee | none | none | none |

- e. Service Renewals without Main Replacements: One renewal and valve at 617 Middle
- f. Service Transfers to New Replacement Mains: none
- g. Radio-Read Installations: none
- h. Large Meter Replacements: none
- i. Meter Relocations: none

ADJOURNMENT

There being no further business to come before the Board, Chairman Kirk adjourned the meeting.

Approved _____2013

Howard Kirk, Chairman

Thomas Koch, Vice Chairman