



**AGENDA
CITY OF HARRISONVILLE
PUBLIC WORKS COMMITTEE
REGULAR MEETING
CITY HALL
NOVEMBER 6, 2014
6:00 PM**

- I. Call to Order**
- II. Approval of Minutes**
 - A. Public Works Committee - Regular Meeting - Oct 2, 2014 6:00 PM**
- III. Agenda Items**
 - A. Phil Zaroor request for curb sidewalk and cost**
 - B. 2014 Chip Seal Program Review**
 - C. Water Hydraulic Model**
 - D. Lake Harrisonville Electric Service**
 - E. Siemens Industry Settlement Agreement**
- IV. Stormwater Issues**
- V. Public Works Project Updates**
 - A. Public Works Update October 2014**
- VI. Airport Reports**
 - A. October Airport Report by Manager James Green**
- VII. General Discussion**
- VIII. Adjourn**

This meeting will be open to the public.

Posted on City Hall Bulletin Board this 30th day of October, 2014

Kim Hubbard, City Clerk



DRAFT
MINUTES
CITY OF HARRISONVILLE
PUBLIC WORKS COMMITTEE
REGULAR MEETING
CITY HALL
OCTOBER 2, 2014
6:00 PM

I. Call to Order

The meeting was called to order at 6:00 PM by Chair Ivan Stull

Attendee Name	Title	Status	Arrived
Kevin Wood	Member	Present	
Doug Meyer	Alternate	Absent	
Morris Coburn	Member	Present	
David Dickerson	Member	Present	
Ivan Stull	Chair	Present	
Bret Brown	Member	Absent	

Others Present: Public Works Director Jerry Gibbs, Assistant Public Works Director Eric Patterson, Street Superintendent Rodney Jacobs, City Engineer Ted Martin, Airport Manager James Green

II. Approval of Minutes

- A. Public Works Committee - Regular Meeting - Sep 4, 2014 6:00 PM** Accepted
Minutes were approved.

III. Agenda Items

- A. Purchase of walk behind street saw for the Street Department** Recommended
Mr. Jacobs asked for consideration to replace the walk behind street saw that the Street Department currently had. Mr. Jacobs reviewed the quotes he had received. Staff recommended approval of purchasing the saw from United Rentals and noted that it was under budget.
- B. TRAFFIC ENGINEERING ASSISTANCE PROGRAM** Approved
Mr. Gibbs reported that the intersection of South and Commercial Street was chosen for Missouri Department of Transportation's Traffic Engineering Assistance Program (TEAP). Mr. Gibbs stated that the recommended solution was to relocate the stop bar closer to Commercial Street and suggested intersection ahead signs to warn northbound traffic.

The committee accepted the findings by MoDOT.

Staff asked the committee for suggestions of other projects to submit TEAP. There was discussion of the intersection by Sutherlands and the possible need of turn lanes.

C. MASTER PLAN & HYDRAULIC MODEL Recommended

Mr. Gibbs reported two engineering firms submitted proposals and made a presentation to the committee of Aldermen Brown, Coburn, and Dickerson, Mr. Patterson and himself. Mr. Gibbs stated it was staff's recommendation to have Burns & McDonnell create the water hydraulic model and prepare the water master plan and have Bartlett & West prepare the sewer master plan. Mr. Gibbs explained that Bartlett & West had developed a sewer service plan for the Wal-Mart Distribution area and the sewer master plan would expand upon the work they have already completed. Aldermen Dickerson and Coburn expressed that they thought Burns & McDonnell would do the best job on the water and sewer master plan and the water hydraulic model.

It was approved for staff to move forward with Burns & McDonnell to prepare the water master plan and create the water hydraulic model and have Bartlett & West prepare the sewer master plan for the west side.

IV. Stormwater Issues

There were no storm water issues to be addressed.

V. Public Works Project Updates

Discussion took place regarding the findings by Burns & McDonnell that the overflow at Lake Harrisonville had a rusted perforation which would need to be monitored. It was noted that the overflow may need to be abandoned and turn the emergency spillway into the overflow.

There was also discussion on how to supply electric to the pump station at Lake Harrisonville. The cost to go overhead versus going under water is substantial, the cost to go overhead is around \$300,000 and under water is over million.

VI. Airport Reports

A. SEPTEMBER AIRPORT REPORT

Mr. Green distributed a report on the open house, Mayor Wood stated he thought the event went very well. Mr. Green reported he had submitted a letter of protest to the MoDOT regarding the highway truss sign installed by them. Mr. Green stated the FAA gave MoDOT a conditional "no hazard to air navigation" and clearance had been provided that the sign have a red obstruction light on it.

Mr. Green reported he had not received any proposals for the mowing and haying at the airport. Mr. Green noted that there has been an individual that has expressed interest in a long term contract but wants to wait till next year.

VII. General Discussion

Alderman Coburn reported on Boy Scout Franklin Patterson who is working toward his Eagle Scout Badge and that his service project for this badge of stenciling locations of stormwater drains around town is going very well.

VIII. Adjourn

Mayor Wood made the motion to adjourn. Alderman Coburn seconded the motion and it was approved.

Meeting adjourned at 6:56 p.m.

Kevin Wood, Mayor & Ex-Officio
Chairman of the Board of Aldermen

ATTEST:

Kim Hubbard, City Clerk

Minutes Acceptance: Minutes of Oct 2, 2014 6:00 PM (Approval of Minutes)



STAFF REPORT

TO: Public Works Committee
FROM: Rodney Jacobs, Director
DATE: October 28, 2014
SUBJECT: Phil Zaroor request for curb sidewalk and cost

Type of Item: *Presentation*

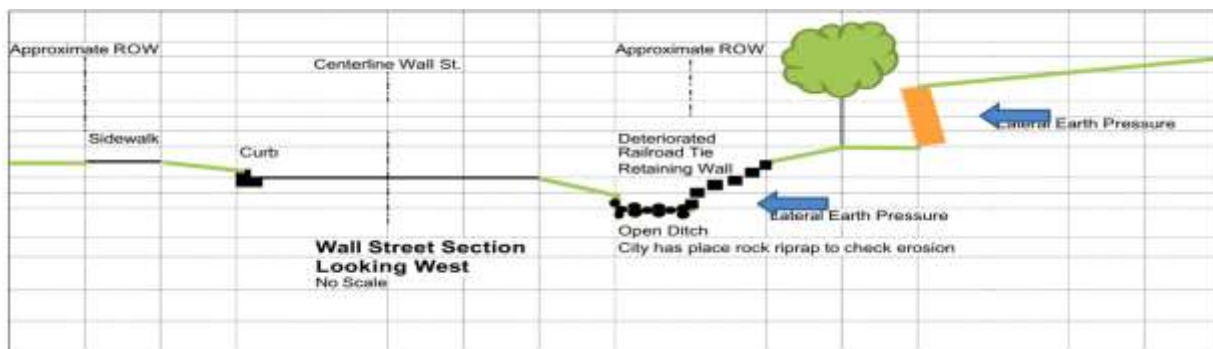
Issue: Phillip Zaroor 800 W. Wall has requested the City to build curb and sidewalk from Short Street to Oakland Street on north side of Wall Street connecting the existing sidewalk and improving the properties. On September 2, 2014, Mr. Zaroor 800 W. Wall Street met with City Engineer Ted Martin, Assist Public Works Director Eric Patterson, and Superintendent of Streets Rodney Jacobs requesting a curb and sidewalk in front of his and his neighbors' property. Mr. Zaroor said that the ditch was unsightly and felt that it was eroding his property putting his retaining wall in jeopardy. Below is a September 2, 2014 email Ted Martian wrote concerning the meeting.

Background: Rodney, Eric, and Ted met this morning on West Wall Street to meet with homeowner and inspect complaint. Phil Zaroor, homeowner told us about his concern that his upper rock retaining wall was leaning and he would like City to do something to repair and protect the wall and his yard. He also said that he and his neighbor would like a sidewalk along his side of the street. Mr Zaroor's frontage is approximately 107' along Wall and his neighbor to the west has approximately 180' of frontage. Recently the homeowner has done some excavation in the ditch, under both walls, and into the upper yard to repair a sewer lateral.

In the past, City staff has installed rock riprap in the ditch to check erosion and this appears to have worked. On the north slope of the ditch is a railroad tie retaining wall, then a grass terrace with trees and north of that is a 4'-5' cut stone retaining wall. The railroad tie retaining wall could be partially in the City road right of way (ROW) but the upper rock retaining wall is on private property. The railroad tie wall has deteriorated and settled to the slope; the upper rock wall has some rotation but appears structurally sound. It is unclear if the sewer lateral excavation has affected the rock wall, but it could be that the failure of the lower railroad tie wall has allowed the toe to push out resulting in the upper rock wall's rotation.



North side of Wall



Mr. Zaroor was told that we couldn't meet his request at this time for the following reasons:

1. The rock riprap installed by staff has functioned to stop erosion;
2. There is no evidence of flooding;
3. The railroad tie wall was installed by the previous homeowner and may be on private property;
4. The upper rock retaining wall is on private property;
5. There is already a sidewalk on the south side of the street;

Options:

Option 1. Do nothing for reasons Mr. Martian has stated- No cost

Option 2. Curb along the existing roadway and fill the ditch covering the railroad ties to the same height as the curb without disturbing them dumping the water back into the ditch before it reaches Oakland Street- 210 feet of curb and fill ditch \$5,620

Option 3. Curb along roadway from Short Street to Oakland Street dumping water at radius of Oakland Street where it would continue down into Lords Park and place a sidewalk next to curb as to not disrupt railroad ties and rock wall- 290 feet of curb \$6,380

290 feet of Sidewalk \$8,410

2 ADA ramps \$2,700

Fill for ditch \$2,500

Estimated Total for Option 3- \$19,990

Recommendation: Staff has reviewed the options and recommends Option 1 agreeing with the comments of Mr. Martian. A second best option is option 2 as it places a curb in front of property owned by Mr. Zaroor and 100 feet of frontage on the adjoining property and directing the storm water back into the ditch to continue down and around the corner to Lords Park. Option 3 is the least favorable due to cost and creates added sidewalk to maintain when a sidewalk is already on the south side of the street. Also with option 3, the area around Oakland Street may need to be engineered to accommodate the fast water moving around the corner which will have a tendency to flood across Oakland Street.

No funds have been allocated for this project, a cost share arrangement where the property owner's requesting the improvements pay for the materials and the City provides the labor is an approach that could be used. This is an approach the State has used effectively in their "Cost Share Program". The 291/71 improvement and the Mechanic St improvement projects are two examples where the City is contributing to the project in order to move them up on the schedule.

A. Discussion Item (ID # 1627)

Phil Zaroor request for curb sidewalk and cost



STAFF REPORT

TO: Public Works Committee
FROM: Rodney Jacobs, Director
DATE: October 27, 2014
SUBJECT: 2014 Chip Seal Program Review

Type of Item: *Report*

The City of Harrisonville has a long history of using chip seal in its street maintenance. The program was contracted similar to our current asphalt overlay contracts before 1974, but since then the Street Department has had the responsibility of providing the program. The materials in chip seal has evolved from kerosene based road oil (cutbacks) and dusty limestone to water based road oil (emulsions) and granite or expanded shale aggregates. The use of emulsions not only reduces pollutants but allow greater flexibility in road maintenance such as fog sealing.

In 2014 the City of Harrisonville used two processes in its Chip Seal Program. They are:

Chip sealing, a process of applying a thin layer of asphalt binder covered by a thin layer of granite serving as a sealer with a wear course of 3/8 inch size aggregate.

Fog sealing, a process of spraying a light coating of asphalt emulsion on a road surface for protection from ultra-violet rays and replacing some of the asphalt oils lost from aging, but provides no additional structural strength to a road surface. On new chip sealed streets it is applied four to ten days after the chip seal has been completed to help lock in aggregate by filling in around the small stones. The process requires the roadway to be closed till the emulsion sets, about 4 hours.

The program is budgeted at \$90,000 and we chip sealed about 6.4 lane miles of roadway with a fog seal added on the major streets such as E. Elm and Eastwood Road giving it an asphalt appearance. The fog seal over chip seal is a simple final application and has received favorable comments from residents. Crews also chip sealed Westchester Drive, a concrete street showing signs of major distress. Normally we don't chip seal concrete streets. Chip seal was used on Precision Drive several years ago with good results in spite of the punishment given it by tractor trailers. In addition to the chip seal, the program fog sealed Healing Way and the Glen Eagle addition with the exception of Nest Court. The Glen Eagle addition was selected because the sun had turned the unused roadway white with oxidation, a condition which this treatment is very useful. In all 1.44 lane miles of roadway were fog sealed at a cost \$1,475 or 15 cents per square yard.

The Department received one negative comment from a letter signed, "Resident of Joy Street". The complaint stated that Joy Street was a nice road until the City chip sealed parts of it creating a hazard to motorcycles and cars. It was suggested that the City concentrate on Mechanic Street (MODOT roadway) which had received a patching of low quality. The letter also gave an example of Oakland Street and along Commercial Street of having loose gravel. In fairness, chip sealing does have drawbacks, the worst being loose gravel. To minimize it, the Department sweeps the road surface the day following operations and in some areas the same day if warranted as the emulsions normally requires 12 to 24 hours to fully set.

The 2014 program improved over prior years due to use of better emulsions and a shift to cleaner aggregate. The majority of chip seal this year was undertaken on streets traditionally on the asphalt overlay program. The prospect of low funding prompted the sealing of E. Elm Street and Eastwood Road to provide them a longer life before the need for an overlay. Webster Street, Morningview Drive, and Westchester Drive are in dire need of being overlaid, and would have been done this year if more funding had been available. Chip sealing will allow them to function for a few more years. The addition of fog seal has improved the appearance of chip seal and may provide a layer of protection to asphalt streets under certain conditions. Chip seals have long history in Harrisonville, though unpopular it is likely to continue as it has in Overland Park and is likely to come back into the City of Belton and Raymore as a way to maintain roadways.

Thank you,

Rodney Jacobs

Superintendent of Streets

B. Discussion Item (ID # 1621)

2014 Chip Seal Program Review

Attachments:

2014 Chip Seal Program Cost



STAFF REPORT

TO: Public Works Committee
FROM: Jerry Gibbs, Director
DATE: October 27, 2014
SUBJECT: Water Hydraulic Model

Type of Item: *Agreement*

BACKGROUND - Two firms submitted a Statement of Qualifications (SOQ) to provide water hydraulic modeling services, Burns and McDonnell and Bartlett and West. An interview panel of city staff and Aldermen Dickerson, Coburn and Brown set in on all or part of the interviews on August 13th. Based on the interviews, it was a unanimous choice to select Burns and McDonnell to submit a scope of services and fee to complete the hydraulic analysis of the city's water system.

ISSUE - The general scope of services for the water modeling is based on a 3.0 MGD maximum build out including the following:

- Evaluate up to three (3) storage tank locations (locations to be determined by pressure deficiency and staff input).
- Evaluate the availability of emergency connections to neighboring water suppliers under emergency water use restrictions equivalent to the average day demand. (Review industry, commercial & residential priorities)
- Perform a critical mains analysis for the I-49 highway crossings.
 - Evaluate up to four (4) vulnerability scenarios to include the items mentioned above and discuss options and capability.
- Prepare system maps illustrating the following:
 - Flow direction under the current average day and maximum day demand conditions.
 - Fire flow contours under current and build out maximum day demand conditions.
 - Pressure contours under the current maximum day demand condition.
- Develop an extended period simulation in the model for *water age analysis* and provide system map with water age contours under the current average day and maximum day demand conditions.
- Prepare opinions of probable cost and a prioritized implementation schedule (Capital Improvements Plan) for characterized as hydraulic related improvements, development driven improvements (i.e. Southwest Planning Area), fire flow improvements, small mains replacements, and looping. This information will be utilized in the rate matrix.

Staff will be working closely with Burns and McDonnell to calibrate the model by performing pressure and flow tests at specified locations and verifying the accuracy of our city water pipe network. The estimated fee for this effort is \$59,937. Staff is recommending a positive recommendation to the Board of Alderman.

Council Bill No.

Resolution No.

Water Hydraulic Model

Exhibit B

2014 Water Master Plan Update
Staff Hours & Fee

City of Harrisonville, Missouri

Scope	Hours	Total
1. Prepare and conduct project initiation meeting with City staff to discuss goals, scope, schedule, required data, field test plan, and other pertinent items. Prepare and distribute meeting minutes.		
Project Manager	4	
Water Supply Engineer	8	\$2,449
2. Review and collect available GIS data.		
Water Supply Engineer	2	
GIS Specialist	4	\$1,088
3. Update model with current GIS files. Distribute existing demands based on physical address. Add future demand alternatives for the City service area.		
Water Supply Engineer	4	
GIS Specialist	56	\$10,621
4. Setup pressure recorders for field testing by City staff. Deliver/Develop testing plan with City at the project initiation meeting. Download data and develop diurnal curves.		
Water Supply Engineer	8	\$2,036
5. Confirm model calibration with field testing results (up to 12 scenarios).		
Water Supply Engineer	36	\$6,910
6. Perform hydraulic analysis for the current demands and build out max day demand of 3.0 MGD. Evaluate up to three tank location, I-49 crossing, emergency connections, and up to four vulnerability runs. Determine improvements required to meet projected demands (includes SW Planning Area). Prepare system maps showing flow direction, water age contours, fire flow contours, and pressure contours.		
Water Supply Engineer	96	
GIS Specialist	8	\$19,835
7. Prepare opinion of probable costs and a prioritized implementation schedule (CIP for hydraulic improvements, development, fire flow, and small mains/looping).		
Water Supply Engineer	12	\$2,303
8. Prepare draft report for City staff review and comment, address comments, and finalize/deliver report.		
Project Manager	4	
Water Supply Engineer	36	
GIS Specialist	4	\$9,494
9. Develop presentation and present findings to City Council & Staff (PowerPoint).		
Project Manager	4	
Water Supply Engineer	4	\$1,682
10. Project Management and QA/QC.		
Project Manager	8	
QA/QC Engineer	8	\$3,519
Total	306	\$59,937

Attachment: Exhibit B - FINAL Engineering Fee 102214 (1622 : Water Hydraulic Model)

Harrisonville – 2014 Water Master Plan Update

Scope of Services:

1. Prepare a list of required information for OWNER to provide ENGINEER. Conduct a project initiation meeting with OWNER to include project goals, scope, schedule, required data, field testing plan, piping changes since last model/GIS (see item 2.), and other pertinent items. ENGINEER shall prepare and distribute meeting minutes.
2. Collect and review the most current water system GIS data. Add new data field in the geodatabase for waterlines that are abandoned-in-place. ENGINEER shall prepare hard copy map book based on grid system provided by OWNER via CADD file for distribution system connectivity and status review by OWNER.
3. Transcribe the review comments from OWNER in the geodatabase and update the water model. Geocode the 2013 customer consumption information in the model and add future demands to the water service area (based on discussions with OWNER staff).
4. Prepare a field testing plan with OWNER to include data logger and fire hydrant test locations for execution by OWNER. Deliver hydrant test forms for OWNER to populate field testing information. Download data logger information and prepare diurnal curves.
5. Confirm and/or enhance the existing model calibration with the field testing results.
6. Perform hydraulic analysis of the existing system and buildout system (includes Southwest Planning Area) scenarios under maximum day, minimum hour, peak hour, and maximum day plus fire flow demand conditions; determine improvements required to meet the projected buildout demand. The buildout maximum day demand condition shall be 3.0 MGD unless indicated otherwise after review of recent historical water demand information. Specific modeling tasks shall include the following:
 - a. Evaluate up to three (3) storage tank locations.
 - b. Evaluate the availability of emergency connections to neighboring water suppliers under emergency water use restrictions equivalent to the average day demand.
 - c. Perform a critical mains analysis for the I-49 highway crossings.
 - d. Evaluate up to four (4) vulnerability scenarios to include the items mentioned above and discuss options and capability.
7. Prepare system maps illustrating the following:
 - a. Flow direction under the current average day and maximum day demand conditions.
 - b. Fire flow contours under current and buildout maximum day demand conditions.
 - c. Pressure contours under the current maximum day demand condition.
8. Develop an extended period simulation in the model for water age analysis and provide system map with water age contours under the current average day and maximum day demand conditions.
9. Prepare opinions of probable cost and a prioritized implementation schedule (Capital Improvements Plan) for characterized as hydraulic related improvements, development driven improvements (i.e. Southwest Planning Area), fire flow improvements, small mains replacements, and looping.
10. Prepare draft report for OWNER review and comment and deliver five (5) hard copies of the final report and CD that includes the final report, updated geodatabase, and hydraulic model.
11. Prepare a PowerPoint presentation that includes project findings and deliver to OWNER.
12. Provide project management and quality-assurance/quality-control through the duration of the project.

Responsibilities of OWNER:

1. Provide list of required information including, but not limited to, the 2013 customer water consumption by physical address and attend the project initiation meeting. All data shall be provided in electronic format.
2. Deliver the most current water system GIS geodatabase and grid system via CADD file.
3. Review and provide comments on hard copy map book and indicate approval, any modifications, and/or any additions to the geodatabase for model accuracy and update. The review shall include, but not limited to, the following:
 - a. Connectivity of intersecting and/or adjacent water mains at junctions and/or water mains that are shown as connected in the geodatabase which are not actually connected.
 - b. Valve status generally described as those valves known to be closed and will remain closed.
 - c. Identify water mains that are abandoned-in-place from end point to end point.
4. Execute field testing plan by placing data loggers, to be provided by ENGINEER, in the distribution system and conduct up to twelve (12) fire hydrant tests. Remove data loggers upon completion of the field testing plan.
5. Work with Engineer to develop and approve the buildout maximum day demand projection that future improvements, with respect to pumping, piping/transmission, and system storage shall be based on in the capital improvements plan. Establish the buildout service area including, but not limited to, the Southwest Planning area and anticipated customer type.
6. Review, comment, and issue approval of the draft report after ENGINEER has sufficiently addressed all comments.



STAFF REPORT

TO: Public Works Committee
FROM: Jerry Gibbs, Director
DATE: October 28, 2014
SUBJECT: Lake Harrisonville Electric Service

Type of Item: Report

BACKGROUND - Replacing the three phase electrical underground primary distribution circuit that feeds the raw water pumps has been on the planning horizon for many years. Kansas City Power and Light (KCP&L) currently provides overhead primary distribution to the Northside of the lake on S Gray Road where a primary meter is located. The City ownership and responsibility begins at this point. The three phase distribution circuit is buried with 1200 lf of electrical underground primary located at the bottom of the lake. The underground primary that was installed was never intended for underwater application. The distribution line becomes aerial on the Southside of the lake and feeds a bank of three overhead transformers.

A June 2010 Larkin Report states *“Three-phase power to the intake pump station is provided by transformers on the Northside of the lake and City owned service cables that run across the lake bottom without conduit. There is no close source of three phase power on the south side of the lake. The generator can handle short term outages. A new three phase power line is proposed to be extended from existing lines located at 215th Street. The line would be constructed to Power Company standards with the intention that they would take over operation and maintenance up to new transformers near the intake on City property. The cost opinion is preliminary and needs to be verified with the Power Company.”*

Staff began working with KCP&L Planning over 24 months ago. Very little progress was made until a new planner was assigned our project. He requested an inrush current analysis (amps required to start pumps). He indicated he was concerned the users in the area would experience a browning or light flickering in an overhead line. I asked Keith Thomas to be involved to be able to respond to issues raised by KCP&L. KCP&L determined they would not be willing to expand an overhead line to the Southside of the lake. They still expressed concern with light flicker.

ISSUE - Underwater cable is very expensive. A project of this type would be close to a \$1M and not be an improvement over the current electric service line. The estimated life is 10 years. The alternative is to span the lake. Finley Engineering has been retained to complete the design from KCP&L's meter to the raw water pump station. The engineering cost was slightly under \$15,000. The Electric Department currently has a contract that could be expanded to include the construction of the overhead distribution. The estimated cost is in the \$250,000 range. Keith Thomas is working with the engineer on the design.

He will be attending the meeting to discuss the progress to-date and next steps.

D. Discussion Item (ID # 1626)

Lake Harrisonville Electric Service



STAFF REPORT

TO: Public Works Committee
FROM: Jerry Gibbs, Director
DATE: October 27, 2014
SUBJECT: Siemens Industry Settlement Agreement

Type of Item: *Agreement*

BACKGROUND - Siemens and the City entered into a Performance Contracting Agreement dated August 16, 2011 (the “PCA”) to install energy saving equipment. The program benefit was the value of the energy saved would be more than adequate to pay for the installation and the purchase of the equipment. The payback is much quicker on some equipment. The plan was to blend the savings to achieve an overall project payback in 14 years. The WWTP and Water Treatment Plant was combined with projects in the Community Center for a total project cost of \$770,278 (25% Community Center, 75% Water/Sewer). The anticipated annual savings were \$74,296. Siemens guaranteed the city would achieve these savings each year. The city is required to pay for an annual energy audit to verify the savings, the cost of the audit is \$4,000 each year. This was all stipulated in the PCA.

ISSUE - In the first annual review performed by Siemens it was discovered there was an energy savings shortfall at the WWTP and Water Treatment plant. In review of the original calculations, it was found the energy savings were over estimated.

The PCA was written where the start date of the savings began when all of the projects were completed. The lighting projects were completed first followed by the treatment plant improvements. This allowed the savings during construction to reduce the shortfall in the first year to only \$830. However the shortfall the second year would be \$11,182 plus 3%. The performance guarantee only remains in place as long as the annual audit is performed. There are thirteen years remaining on the contract. The methodology to calculate the shortfall is stipulated in the PCA. There is no variability. This is the first time Siemens has had a shortfall in any of their projects completed in the US.

Siemens requested the city consider a one-time payment to offset the shortfall as well as the savings associated with avoiding the energy audits. Staff calculated the present value of the \$11,182 annually over the next 13 years and the audit costs we were not anticipating spending after year 3. The final amount agreed upon is \$121,000. 25% of the payment will be deposited into the Community Center Fund and 75% into the Water/Sewer Utility Fund. These percentages represent the project cost allocation. The funds will be used to pay the debt service on the improvements not covered by the energy savings.

Staff is recommending a positive recommendation to the Board of Alderman.

Council Bill No.

Resolution No.

Siemens Industry Settlement Agreement

City of Harrisonville

Year 1 Period Savings
November 1, 2012 - October 31, 2013

Period Program Savings									
Measure Description	Annual Electrical Savings (kWh)	Annual Electrical Savings \$	Annual Demand Savings (kW)	Annual Electrical Savings \$	Annual Water Savings (Gal.)	Annual Water Savings \$	Period Utility Savings	Monthly Operational	Total Period Savings
WWTP Blower	258,471	\$ 20,574	633.1	\$ 5,913	0	\$ -	\$26,487	\$ -	\$ 26,487
WWTP Lighting	3,597	\$ 286	13.0	\$ 118	0	\$ -	\$404	\$ 22	\$ 426
PWTP Decant Pump	574	\$ 46	2.3	\$ 21	204,000	\$ 1,492	\$1,559	\$ 150	\$ 1,709
PWTP Basin Motor	4,306	\$ 343	17.2	\$ 161	0	\$ -	\$503	\$ 45	\$ 548
PWTP Pump VFD	79,749	\$ 6,348	437.0	\$ 4,082	0	\$ -	\$10,430	\$ 200	\$ 10,630
PWTP Lighting	3,794	\$ 302	15.0	\$ 140	0	\$ -	\$442	\$ 8	\$ 450
CC Lighting	188,209	\$ 14,981	409.0	\$ 3,820	0	\$ -	\$18,801	\$ 381	\$ 19,182
CC Occupancy Lighting	32,812	\$ 2,612	0.0	\$ -	0	\$ -	\$2,612	\$ 66	\$ 2,678
	571,512	\$ 45,492		\$ 14,255		\$ 1,492	\$ 61,239	\$ 872	\$ 62,111

Total Period Savings: \$ 62,111
Total Period Guarantee: \$ 73,293
Variance for Period: \$ (11,182)

Project Savings to Date: \$ 72,463
Savings Guarantee to Date: \$ 73,293
Project Variance to Date: \$ (830)

	kWh	\$	kW	\$	Gals	\$	Operational
Option A Savings	533,820	\$ 42,492	1,507.1	\$ 14,073			
Total		\$ 56,565					
Option E Savings	37,692	\$ 3,000	19.5	\$ 182		\$ 1,492	\$ 872
Total		\$ 3,182					
		\$ 62,111					
Construction + Yr 1 Opt. A - Elect.	578,305	\$ 65,993					
Construction + Yr 1 Opt. E - Elect.	40,833	\$ 3,713					
Construction + Yr 1 Opt. E - Water		\$ 1,740					
Construction + Yr 1 Opt. E - Operational Svgs		\$ 1,017					
		\$ 72,463					



STAFF REPORT

TO: Public Works Committee
FROM: Eric Patterson, Asst. Director
DATE: October 29, 2014
SUBJECT: Public Works Update October 2014

Type of Item: *Report***WATER SYSTEMS**

- ☐ **KC Water Transmission Main:**
 - ☐ Keith and a Jerry met with KCW on Wednesday. KCW indicated they are willing to move forward with the agreement. Agreement under review and comments will be received 10-30. Next step is contacting Lees Summit.
- ☐ **Water Treatment Plant Upgrades**
 - ☐ Review of Ballot Issue and discussion of next steps. Notice to Proceed for filter rehabilitation issued. Equipment and filter design pending MDNR review. Electric service to Lake Harrisonville raw water pumps underway with Finley Engineering.

SANITARY SEWERS

- ☐ **Ann Street Sanitary Sewer: COMPLETE**
- ☐ **CCTV - GPS of Manholes** is almost complete & re-televising complete - RedZone has started CCTV of the rest of the City.
- ☐ **WWTP & WTP sludge removal** -Denali has started removing sludge at the water treatment plant

STORMWATER

- ☐ **Morningview Storm Drainage Improvement Project:** Four easements acquisitions are required before the project can be bid.
- ☐ **Chateau** - design has started and first public meeting was 10-02-14

GENERAL/TRANSPORTATION

- ☐ **Power and Water Building** - Preliminary sampling is done and awaiting test results to determine next course of action.
- ☐ **Mechanic Street-**
 - ☐ Bid date moved to fall 2015 due to over 50 temporary easements required for construction.
 - ☐ Reviewing lighting design.
- ☐ **291Partners in Progress-**
 - ☐ Weekly progress meetings have started
 - ☐ Waterline relocation has started

- ☐ Storm sewer on Cantrell Road being installed

Storm sewer on Cantrell Road being installed

- ☐ **North Independence Bridge -**
 - ☐ Waiting final pay-app
- ☐ **2014 Sidewalk Program:**
 - ☐ started
- ☐ **Fats Oil and Grease Program (FOG)**
 - ☐ Robert Edward and Steve Woodring are developing a FOG program to start identifying accountability for the growing grease buildup in the collection system and the WWTP.

A. Discussion Item (ID # 1630)

Public Works Update October 2014



STAFF REPORT

TO: Public Works Committee
FROM: Jerry Gibbs, Director
DATE: October 29, 2014
SUBJECT: Airport Report for October 2014

Type of Item: *Report***Hangar and Tie Down Space:**

- All Hangars are Full, 15 people on the waiting list
- 6 Outside tie down spots available

Fuel:

- Potential jet fuel sales - approx. 200 gallons
- 100LL - our current price is \$5.46 per gallon
- Fuel prices in our service area:

Lee's Summit	\$5.26 per gal.
Butler	\$5.60 per gal.
Gardner	\$5.45 per gal.
Johnson County	\$6.40 per gal.
Grain Valley	\$5.52 per gal.

AVGAS Sales: (Sept. 25th to Oct. 29th, 2014)

Price \$5.46 per gallon

Gallons Sold 1,449.34 gallons (246 gallons used for the open house free flights)

Revenue \$7,913.41 (Minus \$1,178.10 for the open house free flights)

Profit \$818.27

Highway Truss Sign:

The city's objection to the "no hazard to air navigation" determination has been received and accepted by the FAA. City staff has been in contact with one of the airspace specialists and a final determination will be made when all of the aspects of the issue are addressed.

Airport Projects:

The GIS project is complete and our consultants are waiting for the final determination of the highway 7 truss sign before beginning the ALP process so that the issue can be

addressed if needed.

Hangar Heaters:

The second phase of the heater replacement project in the main hangar will begin in the next month so it can be complete before the end of the year. This project will replace the older gas heaters in the main hangar with new infrared electric heaters which are safer.

A. Discussion Item (ID # 1632)

October Airport Report by Manager James Green

Attachments:

Potential Jet Fuel Sales Oct 14 (XLS)

POTENTIAL JET FUEL SALES

(in gallons)

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	<i>ANNUAL TOTAL</i>
2003	?	?	1,700	2,300	2,300	2,500	2,000	2,500	1,800	1,500	1,200	1,400	19,200
2004	1,800	2,500	3,500	2,500	1,500	1,500	3,000	2,800	2,000	2,000	3,200	3,400	29,700
2005	2,100	1,400	1,200	2,200	2,400	2,000	1,500	1,000	2,000	1,500	1,000	1,300	19,600
2006	1,000	1,500	1,800	1,800	1,000	1,300	1,000	1,200	1,500	1,000	1,100	800	15,000
2007	500	1,000	1,000	1,200	1,000	1,200	1,000	500	600	500	300	200	9,000
2008	200	200	200	100	100	200	300	400	200	250	150	100	2,400
2009	150	100	100	150	200	250	150	250	150	150	100	100	1,850
2010	250	350	250	150	150	100	100	150	100	0	200	250	2,050
2011	350	300	250	200	250	200	250	350	200	200	250	200	3,000
2012	150	250	150	200	400	300	200	200	300	200	350	100	2,800
2013	350	250	150	200	250	300	450	250	200	350	550	350	3,650
2014	1,800	500	200	200	300	350	300	200	150	200			4,200