



**AGENDA
CITY OF HARRISONVILLE
PUBLIC WORKS COMMITTEE
REGULAR MEETING
CITY HALL
MAY 7, 2015
6:00 PM**

- I. Call to Order**
 - A. Roll Call**
- II. Approval of Minutes**
 - A. Public Works Committee - Regular Meeting - Apr 9, 2015 6:00 PM**
- III. Public Comments**
- IV. Agenda Items**
 - A. FILTER REHABILITATION BID & UPDATE**
 - B. PAVEMENT/UTILITY INFRASTRUCTURE OVERVIEW**
 - C. Information on SAPP Bros. Truckstop/South area Sewer**
- V. Stormwater Issues**
- VI. Public Works Project Updates**
 - A. PUBLIC WORKS UPDATE MAY 2015**
- VII. Airport Reports**
 - A. APRIL AIRPORT REPORT**
- VIII. General Discussion**
- IX. Adjourn**

This meeting will be open to the public.

Posted on City Hall Bulletin Board this 4th day of May 2015



DRAFT
MINUTES
CITY OF HARRISONVILLE
PUBLIC WORKS COMMITTEE
REGULAR MEETING
CITY HALL
APRIL 9, 2015
6:00 PM

I. Call to Order

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

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	

Also: Director of Public Works Jerry Gibbs, Assistant Director of Public Works Eric Patterson, City Administrator Keith Moody, Airport Manager James Green, Street Superintendent Rodney Jacobs; Public Info Officer/Deputy City Clerk Sheryl Stanley, recording.

Also: Ward 1 alderman-elect Judy Bowman and mayor-elect Brian Hasek (arrived 6:45 p.m.)

II. Approval of Minutes

A. Public Works Committee - Regular Meeting - Mar 5, 2015 6:00 PM Accepted

Morris Coburn moved the minutes of the March meeting be approved as presented. David Dickerson seconded. Minutes approved unanimously.

III. Agenda Items

A. LAKE HARRISONVILLE - IDLE SPEED - NO WAKE

Director Gibbs said the city sometimes receives complaints about the speed of boats on Lake Harrisonville, but without a full time caretaker, it is hard to monitor and control such issues. He would like to amend city ordinance regarding the speed of boats on the lake and the type of motors which could be used.

Alderman Dickerson said the changes proposed would do nothing but create a wash across the lake. He felt it was more important to specify the length of the boats allowed on the lake, as well as the type and horsepower of motors. He also said the city should be extremely cautious about allowing boats which might be contaminated with zebra

mussels on the lake because of the damage they can do to the pipes and intake valves to the city water supply lines.

He said we should encourage bank fishing rather than boats, but Mr. Patterson pointed out that the banks of the lake are hard to walk, so bank fishing is not something people would likely do.

Mayor Wood directed Alderman Dickerson and Director Gibbs to work together on revisions to the boat regulations on Lake Harrisonville and report back to the group at the next meeting.

B. 2015 Asphalt Mill & Overlay Program/Commercial St. Maintenance

Eric Patterson said it had been planned for Commercial Street to receive improvements this year, but there was not enough money in the CIP program. Therefore, staff was recommending we take the money that was initially allocated for smaller streets and use it for a micro-seal of Commercial.

Director Gibbs said the segment of Commercial from Plaza Drive to Independence needs work and a micro seal is the best alternative given the shortage of funds.

Mayor Wood asked what the cost would be to mill and overlay Commercial, and Eric Patterson said it would be approximately \$600,000. Mayor Wood said he thought the best course of action would be to do nothing this year and wait until next year. He said we should concentrate on patching, sealing, filling potholes, etc. in order to save money.

Alderman Dickerson said we should not attempt to work on Commercial Street until the 291 project is finished.

Jerry Gibbs said that while the work is inconvenient for a few days, it is a short term project and the road re-opens within a few days. He said Commercial Street needs attention soon.

Keith Moody said the new diverging diamond interchange is expected to be finished by October and we could do micro-surfacing on Commercial then. Others felt the weather would be too cool by October to get a satisfactory job done.

Mayor Wood asked Rodney Jacobs what he thought the best course of action is. Rodney said we should wait one year, doing crack sealing this year and maybe adding some chip seal.

Director Gibbs pointed out that other streets in town will suffer. Mayor Wood said we must get the best return for our funds. He asked staff to get the cost on mill and overlay and bring it back to the Public Works Committee next month. David Dickerson agreed.

C. Alleys at the Villas of Eastern Hills

Keith Moody opened the discussion on the alleys in the Villas of Eastern Hills subdivision. He said the issue had been brought to the board's attention by Judy Bowman who learned of the situation while campaigning door to door in her ward.

Moody said that the subdivision was built in 2004, and the city has always plowed the alleys, believing they are public rights of way. However, in accepting the final plat, the Board of Aldermen did not stipulate that the H.O.A. would be responsible for clearing these alleys. He asked the board to specify and go on record regarding whether or not the city should be responsible for clearing snow from the alleys in the Villas of Eastern Hills.

Mayor Wood said he was mayor when the subdivision was accepted and he feels that it was a simple oversight. He believes the city is responsible for this service to residents and it was the intent of the board to accept. He made a motion that the city would reinstate plowing of the alleys when it snows, and Morris Coburn seconded. Motion passed unanimously.

Morris Coburn asked that the motion and vote be included in the minutes for the reference of future committees and boards.

IV. Stormwater Issues

Tina Russo, 801 S. Highland Dr., addressed the committee regarding the flooding she and her neighbors are experiencing on their properties due to stormwater run-off. Director Gibbs had photos of Mrs. Russo's home and adjoining properties and used them to illustrate her concerns. The flooding is caused by the general downward slope of the land in her neighborhood. In the front, there are no curbs, gutters or ditches to prevent rainwater from pooling in the yards. In the back, the properties butt up against Memorial Stadium. Mrs. Russo has concerns about the retaining wall surrounding the stadium which is collapsing and rainwater which pours off the rooftop drains onto their properties.

Mrs. Russo also said neighborhood children frequently play on the stadium grounds and even climb onto the stadium rooftop and jump off. Alderman Dickerson confirmed her statements. Mrs. Russo said she has called the police in the past regarding the vandals and trespassing, and they have responded to the scene, but have never talked to the children.

Street Superintendent Rodney Jacobs said the flooding in the front could be alleviated by pouring gutters at a cost of approximately \$500 per lot. However, this would have to be charged to the homeowner, since no city funds are available for these repairs. He said he did not know how the situation with the run off from the stadium could be fixed.

Eric Patterson asked if Mrs. Russo had contacted the school board about the problem. She said she had in the past, but has received no response from them.

Mayor Wood asked Mrs. Russo to get with her neighbors and talk to Street Superintendent Jacobs about pouring the gutters. He also told Mrs. Russo that the city would advocated for her and her neighbors with the schools, and he directed Director Gibbs to speak to the schools facilities manager about the situation and see what could be done.

V. Public Works Project Updates

A. PUBLIC WORKS UPDATE APRIL 2015

Public Works Update - Jerry Gibbs updated members on Lee's Summit purchase of the KC water agreement; and the application for SRF funding.

VI. Airport Reports

A. APRIL AIRPORT REPORT

Airport - James Green said work would begin shortly on the design, and construction bid are expected in late June or early July. He also said he had been contacted by staff from the U.S. Bureau of Weights and Measures and they had been on-site to inspect the facility. He also said he expects to attend the Missouri Aviation and Airport Managers Conference this month.

VII. General Discussion

General Discussion - Morris Coburn said he still hears from people complaining about traffic on Waters Rd, i.e., people speeding and not obeying lane restrictions. Mayor Wood suggested the police department be asked to place the speed monitor in that area to get a true assessment of the number of vehicles on the road and the times when most speeding violations occur.

VIII. Adjourn

With no more business to discuss, David Dickerson moved the meeting be adjourned. Kevin Wood seconded. Meeting adjourned at 7:31 p.m.

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

ATTEST:

Kim Hubbard, City Clerk

Minutes Acceptance: Minutes of Apr 9, 2015 6:00 PM (Approval of Minutes)



STAFF REPORT

TO: Public Works Committee
FROM: Jerry Gibbs, Director
DATE: April 27, 2015
SUBJECT: FILTER REHABILITATION BID & UPDATE

Type of Item: *Bid*

Bids will be received on May 5th for the Filter Rehabilitation contract. A summary of the bids and the apparent low bidder will be identified for the Public Works Committee meeting on May 7th. A recommendation to send to the full Board will be requested.

Attached to this report is a power point presentation providing an overview of the analysis process taken to arrive at the decision to upgrade our existing water treatment plant infrastructure. Alderman Coburn and Dickerson participated in the review process. Staff has received informal confirmation our project will be included in this year's SRF Intended Use Plan for approval. Utilizing SRF will require another CFP, water rate and environmental public hearing as well as other administrative requirements. See attached checklist. I am giving Burns and McDonnell a temporary notice to proceed to begin the planning and design phase for the project upgrades. Contract 2 requires the city to issue a second notice to proceed prior to proceeding with the design of the plant modifications. Contract 2 will complete the remainder of the design including ozone. The estimated engineering cost is \$1,298,000. This phase is anticipated to require 8-9 months. SRF approvals and bid phase would take another 3-4 months. The project could not start construction until after April or May of 2016. A draft project schedule is attached. One of the first task will be a min-charrette to discuss building functionality, size, and location/ design considerations. The Board of Alderman will need to approve contract 2. Staff would request a recommendation to proceed.

SRF will not provide formal approval until September of this year. Any work completed before the public hearings if MDNR-SRF decide to make changes will not be eligible for inclusion in the bonding. I view this to be a highly unlikely scenario based on our approach and goals.

A. Discussion Item (ID # 1834)**FILTER REHABILITATION BID & UPDATE****Attachments:**

WATER TREATMENT OVERVIEW 5-7-15 (PPTX)

Checklist Item 4a (DOCX)

Harrisonville Project Sch 4-28-2015 (DOCX)

Commission Workshop
Water Facility Plan
Harrisonville, MO



Attachment: WATER TREATMENT OVERVIEW 5-7-15 (1834 : FILTER REHABILITATION BID & UPDATE)

Key System Data

- Build-out demands
- Lake Harrisonville
 - 1971 construction
 - Intake in deepest part of lake
- Raw waterline
 - 5.5 miles of 12-inch
- Contract with KCMO for 5 MGD
 - Service area acquisition required
- Landlocked water service area



Key System Data

- Water Plant
 - 1978 construction
 - 2.4 MGD
 - Clarification plant
 - Expensive to operate
 - Process opportunities



Identify Primary Goals

1. Eliminate taste & odor complaints
2. Improve/optimize treatment process
3. Assure future regulatory compliance
4. Increase capacity to 3 MGD
5. Extend life of facilities
6. Enhance protection of public health

What to do?



Step 1: Assessment Tasks

Supply

- Lake Yield
- Lake Sediment
- Intake
- Well Redevelopment
- Raw Water Transmission

WTP

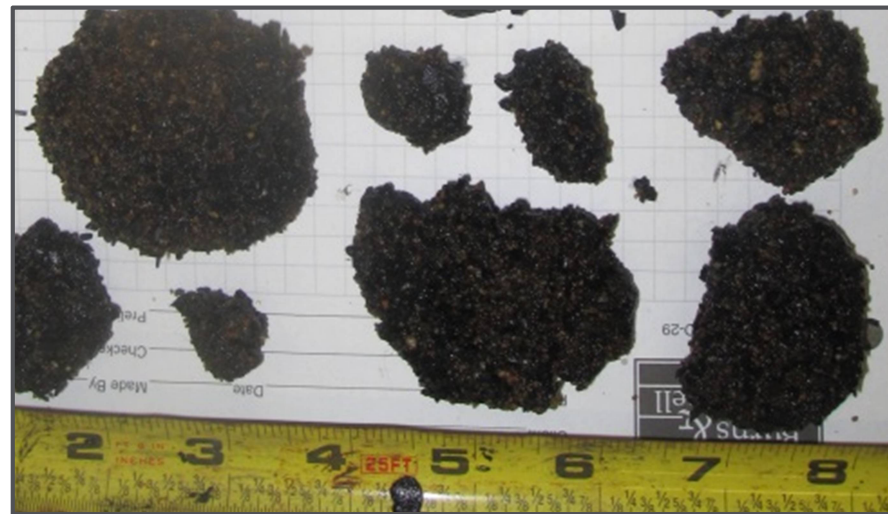
- Jar Tests – Optimization and T&O Reduction
- Condition Assessment
- Process
- Regulatory
- Hydraulic

Distribution

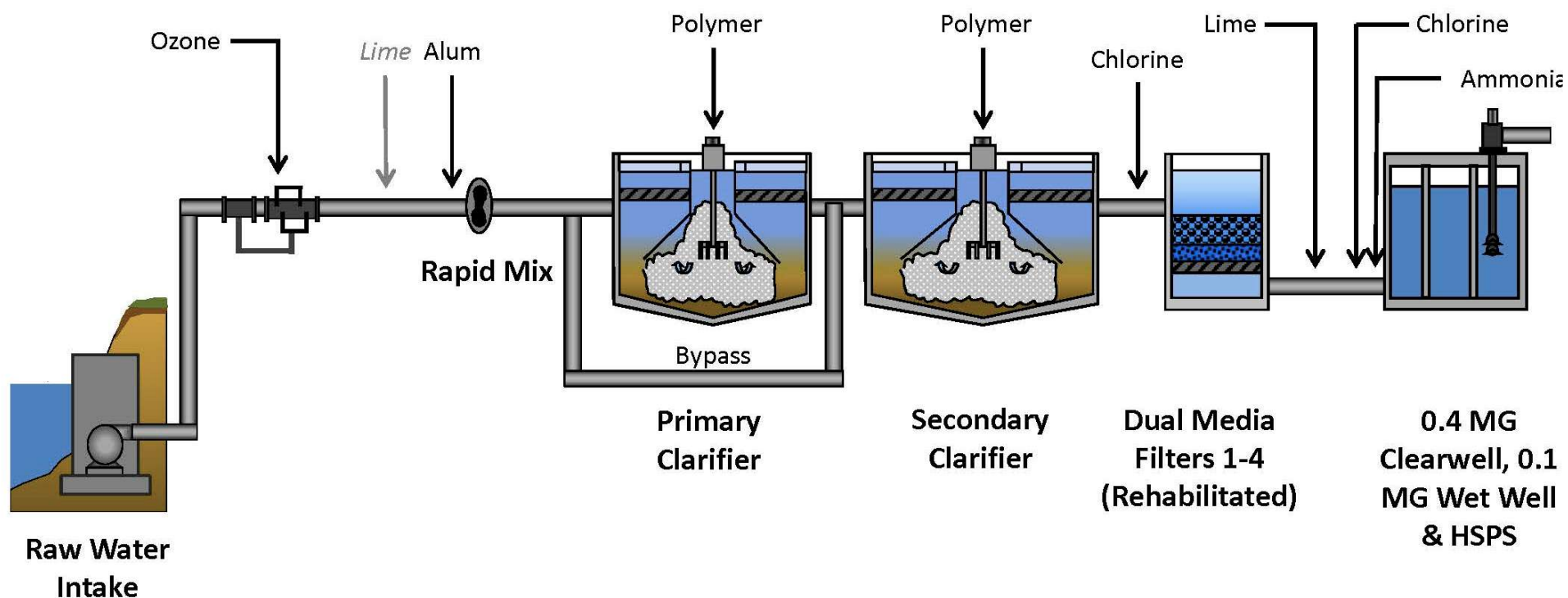
- Interconnections
 - Existing
 - Future

Filter Evaluation

- Media Condition
 - Mudballs
 - Poor sizing
 - Significant loss of depth
- Backwash
 - Poor distribution from underdrain
 - Insufficient pump capacity
- Benefits of Air Scour



Preliminary Design



Attachment: WATER TREATMENT OVERVIEW 5-7-15 (1834 : FILTER REHABILITATION BID & UPDATE)

Look for Ways to Reuse Existing Resources

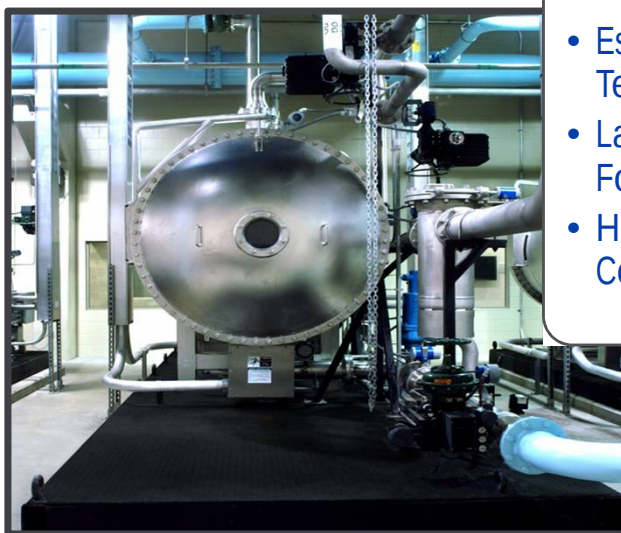
- Example: Reusing majority of existing infrastructure
 - Lake, intake, pumps, and raw water transmission
 - Basins
 - Filters boxes/piping and filter building
 - Clearwell
 - Lagoons
 - Yard Piping
 - High service pump building



Reuse

Equipment Selection

Traditional Tube Dielectric Generators

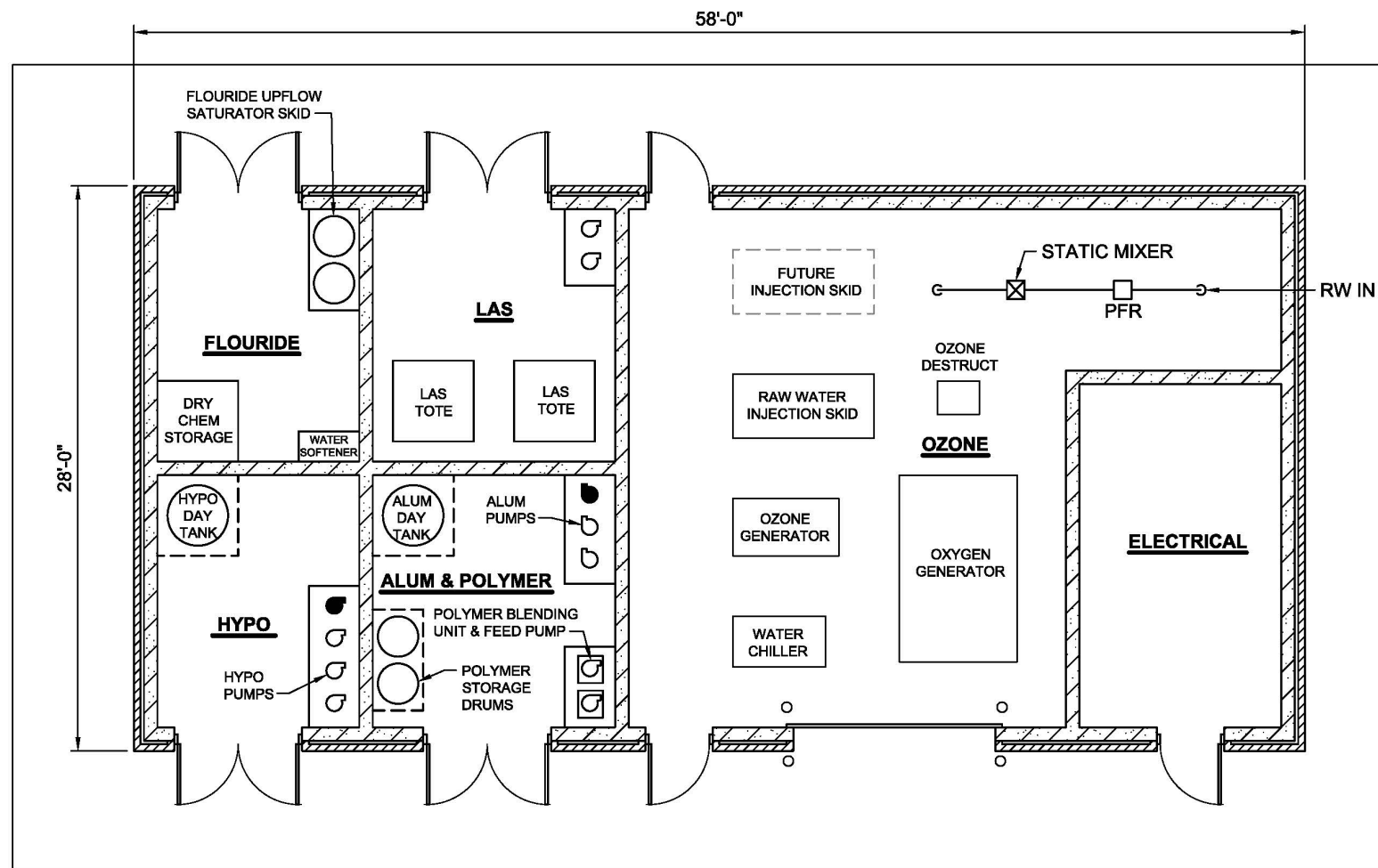


- Established Technology
- Large Footprint
- High Capital Cost

Modular Plate Dielectric Generators



- Newer Technology
- Small Footprint
- Integral Redundancy
- Lower Life-Cycle Cost

**LEGEND**

- METERING PUMP
- TRANSFER PUMP
- CONTAINMENT

OZONE/CHEMICAL BUILDING**FLOOR PLAN**

EXHIBIT 1
CITY OF HARRISONVILLE
WTP IMPROVEMENTS
OZONE / CHEM / ELEC
BUILDING

Clean Water (CW) and Drinking Water (DW) State Revolving Fund (SRF) Checklist

Checklist Item		
Application Clean Water App and Instructions Drinking Water App and Instructions	Date	Comment
Facility Plan / Engineering Report Clean Water Checklist Drinking Water Checklist		
Affidavit of Work Authorization		
Clean Water Authorized Representative Resolution Drinking Water Authorized Representative Resolution		
Ballot Language (Submit draft if not already in place)		
Canvass of Vote		
Applicant Assurance of Local Share		
Anti-Lobbying Certification Disclosure of Lobbying Activities		
SAM Checked		
Project Schedule		
Intermunicipal Agreement (if applicable)		
Drinking Water TMF Checklist TMF Instructions		
Environmental Clearance:		
1. Division of State Parks		
2. Division of State Parks, Historic Preservation		
3. U.S. Dept of Interior, Fish and Wildlife		
4. Corp of Engineers District Office		
5. A-95 Clearinghouse		
6. MO Geological Survey		
7. Missouri Department of Conservation		
Facility Plan With Map and Public Meeting		
1. Meeting minutes		
2. Affidavit of Publication (30 days notice required)		
3. List of Attendees		
4. Facility Plan Approval		
Environmental Impact Hearing (CW and DW)		
1. Verbatim transcript of the hearing		
2. Affidavit of Publication (30 days notice required)		
3. List of Attendees		
User Charge Hearing (CW)/Meeting (DW)		
1. Meeting minutes		
2. Affidavit of Publication (30 days notice required)		
3. List of Attendees		
Environmental Information Document (EID)		
FONSI/CATEX Approved		
CW Model User Charge Ordinance (Actual Use) CW Model User Charge Ordinance (Flat Rate) DW Model User Charge Ordinance		
CW Model Sewer Use Ordinance		

DW Model System Use Ordinance		
CW AE Agreement Checklist		
DW AE Agreement Checklist		
1. Certification and Procurement		
2. System for Award Management (SAM) checked		
3. Anti-Lobbying Certification Form and Disclosure of Lobbying Activities		
4. Affidavit of Work Authorization		
5. Contracts: Planning/Design/Construction		
6. Contract Approval		
Easement Acquisition Certifications (Prior to Loan & Grant Award)		
1. Property Acquisition Assurance CW or DW		
2. Uniform Relocation Certificate		
3. Eligible Land or System Purchase if Applicable		
Due Diligence Due Diligence Questionnaire Due Diligence Review Checklist		
Construction Permit Clean Water App and Instructions Drinking Water Application		
Plan & Specifications Checklist Clean Water or Drinking Water		
1. Contract 1		
2. Contract 2		
3. Addenda		
<u>Do Not Proceed With Advertisement Of Bids Until Notified By The Department</u>		
Bid Document Checklist		
Bid Document Review		
Sub-Recipient Informational Form (Copy to Tonya)		
Executed Contract Review		
1. Contract 1		
2. Contract 2		
Small Purchase (\$25,000 or less)		

PROJECT SCHEDULE

Project: Harrisonville Water Treatment Plant Improvements

Date: 4/28/15

<u>ACTIVITY</u>	<u>DATE</u>
Engineering Report/Facilities Plan submitted to SRF.....	08/11/2014
Engineering Report\Facility Plan Comments by MDNR.....	03/20/2015
DDQ Draft Submittal to FAC.....	05/01/2015
Revised Engineering Report\Facility Plan.....	05/22/2015
Submit draft user charge for FAC review prior to public notice of meetings.....	05/15/2015
Submit draft clearance letters for FAC review prior to public notice of meetings.....	05/15/2015
Public Notices for Engineering Report\Facility Plan, Environmental Impact & User Charge (30 Days Prior to Meetings).....	5/29/2015
Public Meetings and Hearing for Engineering Report\Facility Plan, Environmental Impact & User Charge.....	06/30/2014
Submit Environmental Impact Documents.....	05/15/2015
Submit Plans & Specifications for Review.....	12/15/2015
FONSI Public Notice (30 Days).....	06/19/2015
FONSI Issuance.....	07/31/2015
Secure Easements & Hwy. Permits.....	NA
Approval of Plans & Specifications.....	01/02/2016
Advertise for Construction Bids (30 Days).....	01/15/2016
Receive Construction Bids	02/15/2016
Submit Bids for FAC review.....	02/15/2016
Loan Closing (approximately 60 Days from receiving bids).....	04/15/2016

Attachment: Harrisonville Project Sch 4-28-2015 (1834 : FILTER REHABILITATION BID & UPDATE)

Award Construction Contract..... 03/01/15/2016

Notice To Proceed with Construction..... 03/16/2016

Initiation of Operation (operation of the first operable segment
of the project or when operations are capable of being initiated)..... 11/30/2015
(Filters); 3/30/2017 (WTP)

Construction Completion (submittal of Statement of Work Complete
and close out documents)..... 5/30/2017 (WTP)

Project Completion..... 5/30/2017 (WTP)



STAFF REPORT

TO: Public Works Committee
FROM: Jerry Gibbs, Director
DATE: April 27, 2015
SUBJECT: PAVEMENT/UTILITY INFRASTRUCTURE OVERVIEW

Type of Item: *Report*

This report is to provide a snap shot of the annual depreciation value of our roadway system and utility infrastructure asset. Annual utility depreciation is based on a straight line of the life expectancy of each type of asset and the cost to replace in current dollars. For example if an asset has a value of \$1,000, life expectancy of 10 years, it is depreciating \$100 per year. The asset may last 10 years, more than 10 years or less than 10 years. If there is a large number of these assets, the approach would be to replace a few each year and reduce your chance of needing to replace a much larger number of assets all at one time. The numbers in bold represent the optimal funding level to support annual expenditure on a straight line depreciation approach.

The pavement preservation the Street Department employs is a network level, long-term strategy that enhances pavement performance by using an integrated, cost effective set of practices that extend pavement life, improve safety and meet motorist expectations (FHWA). Strategies used to extend the life of the pavement, retard deterioration and maintains or improves the functional condition of system (without increasing structural capacity) are Crack seal, Pothole Patching, Thin Overlay, Chip seal, Slurry seal and Micro-surfacing. Funding levels have not been adequate to enhance pavement performance system-wide.

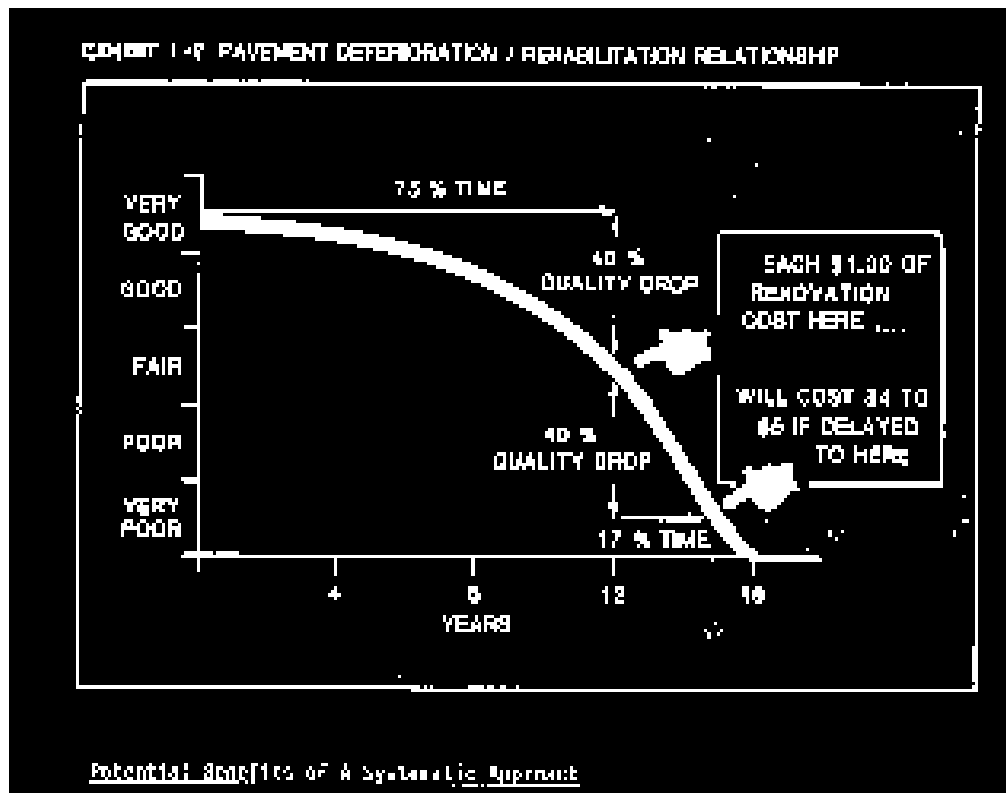


Figure 1

Effects of Maintenance and Rehabilitation

These treatments have two main effects (Deighton, 1997¹):

1. They immediately improve the pavement condition. For instance, a slurry seal can eliminate most minor surface distresses.
2. They affect the future rate of deterioration. For instance, crack sealing prevents water from entering the pavement structure and subgrade through open cracks, which slows future deterioration.

In general, maintenance can slow the rate of deterioration by correcting small pavement defects before they can worsen and contribute to further defects. Beyond a certain point, however, defects become too large for correction by mere maintenance. At this point, rehabilitation can be used to effect a wholesale correction of a large number of relatively severe defects, which provides a step increase in pavement condition. Figure 1 illustrates this concept. Types of roadway treatments to consider are:

- ☐ Routine maintenance filling cracks, pothole repairs
- ☐ Periodic maintenance fog seals, slurry seals, chip seals, micro-surfacing
- ☐ Rehabilitation structural overlays such as a 2" mill and overlay
- ☐ Reconstruction (design and construct an entire new road)
- ☐ Ancillary (leveling and spot repair, usually done in concert with other treatments)

Keep in mind that not all treatments will reset pavement condition to its original new-construction value. Determining how a particular pavement should be treated, when and to what extent are all decisions that can be made with the aid of a pavement management system (PMS).

Effects of Maintenance and Rehabilitation Timing

In addition to the basic concepts illustrated in Figure 1, the timing of maintenance and rehabilitation actions can greatly influence their effectiveness and cost as well as overall pavement life. In general, once a pavement needs treatment, the sooner a maintenance or rehabilitation activity is undertaken, the more cost-effective it will be. Figure 2 demonstrates this concept. Notice that for the first 75 percent of pavement life the pavement condition drops by about 40 percent. However, it only takes another 17-percent of pavement life for the pavement condition to drop another 40 percent. Additionally, in order to restore pavement condition to a predetermined level, it will cost 4 to 5 times as much if the pavement is allowed to deteriorate for even 2 to 3 years beyond the optimum rehabilitation point. This increase in cost is because (1) the pavement condition must be improved by a greater amount (e.g., “very poor” to “very good” versus “fair” to “very good”) and (2) it costs more money per unit of pavement condition increase (e.g., it costs more to go from “very poor” to “poor” than it does from “fair” to “good”).

Summary

Left alone pavements will typically deteriorates over time at an ever-increasing rate. Maintenance and rehabilitation can slow or reverse this deterioration. The degree to which this occurs is dependent on the type of maintenance or rehabilitation as well as the timing of such actions. In general, an early and systematic maintenance and rehabilitation plan is the most cost effective and results in the greatest extension of useful pavement life.

B. Discussion Item (ID # 1833)

PAVEMENT/UTILITY INFRASTRUCTURE OVERVIEW

Attachments:

M E M O R A N D U M Condition of Public Infrastructure April 24 2015 (DOCX)

Infrastructure Life Cycle Values (XLSX)

M E M O R A N D U M

TO: Jerry Gibbs Public Works Director

FROM: Rodney Jacobs Superintendent of Street

DATE: April 24, 2015

SUBJECT: Condition of Roadway and Storm water Public Infrastructure

Staff has prepared a brief summary of the condition of Harrisonville's public infrastructure for the purpose of future planning and public safety.

Streets: Street Department staff performs a yearly evaluation of the 146 lane miles of city maintained roadways each December using the Pavement Condition Index (PCI) method. Streets receiving a rating of 70 or above would be eligible for a fog, slurry seal, chip seal or micro-surfacing (\$3/sq yds). Where any section receiving less than a 70 percent score but more than 40 percent will require a more expensive treatment such as milling and resurfacing (\$9 /sq yd). In 2014, thirty-six lane miles received a score of less than 70 compared to nineteen lane miles failing in 2014. This year's budget will spend \$110,690 less than in 2014 for asphalt and sealing furthering the downward trend. In the past chip seal was used extensively on chip seal streets, but in 2014 several asphalt roadways including Eastwood Rd, E. Elm Street, and Webster Dr. were chip sealed to preserve them. Even concrete streets, Westchester and Precision Drive have been chip sealed with limited success in an effort to keep them passible. While chip seal on concrete streets is unusual, the use of chip seal on asphalt streets is a good method of sealing but many residents view it as a step backwards.

Storm drains: Harrisonville has areas of storm water infrastructure over 60 years old of corrugated metal pipe (CMP) with a service life expectancy of 25-40 years. When a storm covert fails, it generally fails in the invert which causes a loss of structural integrity. This type of failure allows the development of sink holes as dirt is allowed to enter the pipe creating sink holes above it. A storm drain was replaced by city crews in a yard on James Street over the winter where a resident fell into a hole but thankfully not injured. A larger storm drain on Oakvale Dr. is being scheduled for replacement this fall. While staff considers these projects a priority, time constraints make this work challenging by taking time away from other duties including our mandated obligation to inspection all storm water structures and documenting contaminates found as part of the MS4 storm water regulations which monitor the quality of surface water being discharged into the waters of Missouri.

Curbs: Curbs serve to direct water, protect roadways and add value to a community and their repair is often requested from residents. Curbs built in the 1980's and 1990's are crumbling at an alarming rate in Harrisonville. It has been blamed on a variety of causes but it is reasoned to be that the concrete mix was of a poor quality. Harrisonville replaces some curb every year along with sidewalk but is rapidly falling behind the need for replacement. The Street Department 2015 inventory list 8.5 miles of curb needing replaced estimated at \$895,820.

Sidewalks: The City of Harrisonville believes that sidewalks are important for the safety of its residents and their condition is considered as important as its streets. The challenge is to maintain the cities 33.3 miles of sidewalk and comply with the Federal ADA standards enforced by the Department of Justice

with declining revenue funds. The estimated cost to bring all sidewalks up to current ADA standards is \$2,744,856.

HARRISONVILLE Infrastructure Life Cycle Values

Roadway Surface Type	Unit	Life	Annual %	Total Length	Annual Miles	Annual Units	Estimated Cost per Unit	Annual Cost
Concrete	sq ft	25	4%	3.6	0.14	18,248	\$ 8	\$ 145,981
Asphalt	sq yd	20	5%	33.7	1.685	23,725	\$ 56	\$ 1,328,589
Seals	sq yd	7	14%	25.4	3.63	51,110	\$ 3.00	\$ 153,330
Brick Paver	sq ft	50	2%	0.2	0.004		\$	-
Gravel				0.6	0		\$	-
					0		\$	-
Curb & Gutter	lf	25	4%	35.9	1.44	15,164	\$ 50	\$ 758,208
Sidewalk	4 ft/lf	25	4%	32.75	1.31	7,582	\$ 25	\$ 189,552
2" Mill & Overlay	sq yd	10					\$ 9.00	
Full depth Reconstruction	sq yd	20					\$ 56.00	
Seals (Chip & Seal, Micro-Seals, etc)	sq yd						\$ 3.00	\$ -
Curb & Gutter Replacement	LF						\$ 25.00	
Residential Street					2"/6"/ 95% SG		28'	
Collector Street					2"/7"/ 95% SG		36'	
Water Lines 4"	LF	80		29,760		372	\$ 62.85	
Water Lines 6"		80		56,275		703.4375	\$ 62.85	
Water Lines 8"		80		169,954		2124.425	\$ 62.85	
Water Lines 10"		80		35,027		437.8375	\$ 68.75	
Water Lines 12"		80		32,844		410.55	\$ 68.75	
Water Lines 15"		80		10,982		137.275		
TOTAL				334,842		4,186	\$ 68.75	\$287,755
Sewer Lines 6"	LF	80						

Attachment: Infrastructure Life Cycle Values (1833 : PAVEMENT/UTILITY INFRASTRUCTURE OVERVIEW)

Sewer Lines 8"	80	265,531			\$	30.00		
Sewer Lines 10"	80	17,635			\$	44.87		
Sewer Lines 12"	80	12,492			\$	48.00		
Sewer Lines 15"	80	10,892			\$	52.00		
Sewer Lines 18"	80	14,461			\$	56.00		
Sewer Lines 21"	80	5,834			\$	60.00		
Sewer Lines 24"	80	3,614			\$	64.00		
Sewer Lines 30"	80	1,192			\$	68.00		
TOTAL	80	331,651	62.8127	4,146		\$		124,369
Storm Sewer (Corrugated metal) LF	40	46,125		576	\$	112.26	\$	64,662
Storm Sewer (HDPE) LF	80-100	14,229		178	\$	120.00	\$	21,360
Storm Sewer (Concrete) LF	80	28,066		351	\$	111.16	\$	39,017



STAFF REPORT

TO: Public Works Committee
FROM: Eric Patterson, Asst. Director
DATE: April 30, 2015
SUBJECT: Information on SAPP Bros. Truckstop/South area Sewer

Type of Item: *Report*

Background: Sapp Brother's Truck Stop is going in at the 7 highway south exit and is currently not in the City limits. They have completed the necessary studies to be issued an operating permit to install and run their own package sewer plant. They are currently approximately 2 weeks away from ordering this plant from Smith and Loveless. There is a 6 month lead time on getting the equipment. Their goal is to be operational by January 2016.

They have offered to share the property that their plant will sit on. Originally we asked them to participate in the cost of putting in a regional sewer "lift station" having capacity for all development within the area new and existing. The estimated cost of 2 million dollars, was too expensive for them and they declined participation. Don Quinn, an executive with Sapp Brothers expressed a willingness to cooperative with the city but did not want annexation as a condition of their cooperation. He further stated they would consider annexing if it makes sense to annex. He also expressed concern with the city's protest of their request to form a TDD.

We have entered into a contract with Bartlett & West to review if there could be more of a phased approach in providing sewer service to this area. Bartlett and West will review several options including:

1. Package plant with added capacity for other development potential. The variability will be how much added capacity, location & cost.
2. Pressurized system - Capacities similar to package plant option, receiving sewer capacity limitations, location of pump station, individual grinder pumps and operational issues.
3. Timing - Sapp Brother is set to spend about \$400,000 for the package plant. If we are to achieve their participation a viable solution and commitment will need to be found quickly.

Staff would request the Committee members view point on moving toward a solution including or not including Sapp Brothers.

C. Discussion Item (ID # 1841)

Information on SAPP Bros. Truckstop/South area Sewer



STAFF REPORT

TO: Public Works Committee
FROM: Eric Patterson, Asst. Director
DATE: April 30, 2015
SUBJECT: PUBLIC WORKS UPDATE MAY 2015

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

- ☐ **KC Water Transmission Main:**
 - **SOLD MONEY RECEIVED**
- ☐ **Water Treatment Plant Upgrades**
 - Filter Replacement bid 2 PM May 5
 - Informally notified City will be recommended for full SRF funding. In the Draft "Intended Use Plan"
 - Notice to begin design process issued to Burns and McDonnell
 - Mini-charrette date pending for initial project planning

SANITARY SEWERS

- ☐ **CCTV - GPS of Manholes** is almost complete & re-televising complete - RedZone is about 95% complete with CCTV of the rest of the City.
- ☐ Redzone completing sewer evaluation
- ☐ Next steps will require developing a revised sewer map with manholes and line segments based on inspections

STORMWATER

- ☐ **Morningview Storm Drainage Improvement Project:** Four easements acquisitions are required before the project can be bid.
- ☐ **Chateau -** One property owner no longer wants a swale through their yard. Result will be a grading change on property but a storm sewer pipe will still be necessary.

GENERAL/TRANSPORTATION

- ☐ **Power and Water Building -** Work plan being developed to remove water.
- ☐ **Mechanic Street-**
 - Bid date September 2015. One way traffic eastbound during construction
- ☐ **291Partners in Progress-**
 - Completion by contract October 15, 2015
 - SB off ramp opened before May 5th deadline
 - Bridge decks poured
- ☐ **North Independence Bridge -**

- Waiting final paper work (one contractor has not been paid)
- ☐ **2014 Sidewalk Program:**
 - **DONE**
- ☐ **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 # 1840)

PUBLIC WORKS UPDATE MAY 2015



TO: Public Works Committee
FROM: Jerry Gibbs, Director
DATE: April 29, 2015
SUBJECT: APRIL AIRPORT REPORT

Type of Item: *Report*

LAWRENCE SMITH MEMORIAL AIRPORT REPORT

by James Green

For the month of April, 2015

Hangar and Tie Down Space:

- All hangars are full, 16 people on the waiting list
- 6 Outside tie down spots available

Fuel:

- Potential jet fuel sales - approx. 250 gallons
- 100LL - our current price is \$4.50 per gallon
- Fuel prices in our service area:

Lee's Summit	\$4.57 per gal.
Butler	\$4.80 per gal.
Warrensburg	\$4.35 per gal.
Johnson County	\$4.75 per gal.
Ottawa	\$4.84 per gal.

AVGAS Sales: (April 2nd to April 29th)

Price \$4.50 per gallon
 Gallons Sold 473.6 gallons
 Revenue \$2,131

Profit \$449.92

METAR Reporting Equipment:

A METAR (Meteorological Terminal Area Routine) weather report is a standard report used by pilots to read weather reports at an airport with an AWOS (Automated Weather Observation Station) such as Harrisonville. In the past the AWOS at the airport has not been able to deliver verified METAR data due to technological constraints but a new device is available to make it possible for our site.

The Equipment is expected to cost around \$800 and will require an additional data service subscription for \$60 per month to deliver the verified data. MoDOT has started a program that will purchase the equipment and pay for the installation if the city pays for the monthly data service. This will allow data collected at the AWOS to be delivered to incoming and outgoing pilots as well as the National Weather Service and National Oceanic and Atmospheric Administration.

Runway & Ramp Area Maintenance Project:

The design and construction services agreement were approved by the Board of Alderman and a *Notice to Proceed* has been issued.

Fuel Testing:

The Department of Weights and Measures has tested the aviation fuel and concluded that it meets all requirements and no deficiencies were found. This test will be performed on an annual basis.

A. Discussion Item (ID # 1836)

APRIL AIRPORT REPORT

Attachments:

April Jet Fuel Chart (PDF)

POTENTIAL JET FUEL SALES

(in gallons)

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	ANNUAL
													<u>TOTAL</u>
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	250	350	4,800
2015	250	200	350	250									1,050