# Memorandum City of Lawrence Public Works

**TO:** Mark Thiel

FROM: Tom Orzulak, Street Division Manager

**Date:** 01/13/2012

RE: 2011 Street Division Year End Report

The City of Lawrence Street Maintenance Division is responsible for 323 center line miles of streets (811 lane miles) with 40 employees. The work force is divided into 4 crews, asphalt, concrete, levee/sweeping/alleys and storm water.

The Street Maintenance Division provides a wide range of services, some you would expect and a lot of things you might not. Our normal activities include pot hole patching, curb and gutter repair, City owned sidewalks and wheel chair ramps, crack sealing, street sweeping, snow removal and storm drain and pipe cleaning. These are the things that people see us do every day.

We maintain the Kansas River Levee system. The levee covers 2600 acres and is about 13 miles long. The Levee protects North Lawrence and a large portion of farm land in Douglas County from the Kansas River and Mud Creek. The river levels are monitored by our staff year round and are the first to respond to rising water levels. We also maintain 8 miles of the Levee top for recreation, a popular place for walking, jogging and bike riding.

We take care of 250 miles of open drainage, many of which that are in remote areas of the City. We also take care of the three storm water pump stations in North Lawrence. These pumps keep the underpass on North 2nd street dry and remove up to 22,000 gallons of water per minute form the low lying areas every time it rains.

The Street Division provides traffic control devices for special events, all emergencies such as fires or major traffic accidents and as needed throughout the community. All members of the Division have received training for natural disasters such as tornadoes or floods and are experts at debris management and removal. It is safe to say that no matter what happens in Lawrence, the Street Division is there providing service.

The winter season of 2011 started off as the previous ended with 7 snow events in a row. We did get a break, however, during the late fall and end of the year. We have finished 2011 with only 2 minor snow/ice events in December.

In September of 2010, we purchased a spray injection patch truck and oil tanker. With this piece of equipment we have been able to make more permanent asphalt patches. This equipment makes its own asphalt form "on hand" stocked piled materials. As long as the pavement temperature is above freezing we can patch. We have used this equipment throughout the spring and early summer season on problem areas which has cut down on the number of holes we had this year. Along with better patching methods, the repaving of 6<sup>th</sup> St, from Massachusetts to Bluffs Dr and from Monterey Way to Folks and the reconstruction of Kasold from 31<sup>st</sup> St Clinton Parkway and Bob Billings Parkway from Crestline to Kasold has

helped us reduce pot hole complaints dramatically. To date the number of pot holes calls from the Pot Hole Hot Line has gone from 3,108 in 2010 to 451 for all of 2011. At the end of the year, we had patched 12,575 pot holes.

We have had 4 major events not related to street repairs last year. They were the St. Patrick's Day parade, the Tour of Lawrence Bike Race, the Kansas Relays Downtown Lawrence and the Old Fashion Christmas Parade. These special events, along with numerous runs, walks sidewalk sales and block parties require putting up signs and placing barricades, extra sweeping and general assistance to other Departments.

There are 3 major projects that, as a division, were completed. The first is a core drilling rig that was constructed in house which eliminated the need to hire an outside contractor to perform this task. The second is the construction of a salt brine generation system which we have incorporated into a pre-treating/pre-wetting system to enhance our snow removal operations. The third is a GPS tracking system, also for snow removal, that provides real time information about our progress during a snow event. During a snow event, citizens can go to our snow page on the City's web-site and see in real time our snow equipment in action. People can also access live camera shots of key intersections to view road conditions via the Intelligent Traffic Management Network installed this summer.

There are 4 projects that I would like to highlight from the past year.

- The Kansas Relays Downtown. This was a special challenge and a source of great pride. It was the first time in the United States that a world class Shot Put event was held out of doors on a city street. Athletes from all over the world competed in downtown Lawrence on an arena that was built by street employees in 8 hours and removed before first light the next morning.
- 2) The Concrete Repair of Bardth Ct. This was a project that entailed the patching of all pavement and curbing in this south east Lawrence cul-de-sac. After the work was completed, we received a letter signed by every resident of the street, not only thanking us for the work, but complementing the crew on their courtesy, organization and their skill during the project.
- 3) Completing the Salt Brine System. Every member of the Division work on this project throughout the year to complete it before snow season. The system was completed at about a third of the cost of a commercial system and the work was done without interfering with other projects.
- 4) The Resurfacing of Broken Arrow Park. This project repaired the drives and the parking areas of Broken Arrow Park at about 40% of contract price. The division also received the Tom Wilkerson Teamwork Award from Parks and Recreation for this project.

These projects demonstrate our skills, our pride in workmanship and our commitment in Providing Quality City Services.

The continued growth of the division in terms of responsibility, project complexity and size continues to grow with much success. The divisions' staff is a group of professionals that are eager to take on these growing responsibilities. In many instances the only limit to their ability will be equipment owned. I look forward to continued growth of the division with much success.

### **MAJOR PROJECTS COMPLETED (in addition to routine maintenance)**

- 1. Traffic calming island at Atchison Ave and Clinton Parkway,
- 2. Graded all alleys in the City 4 times.
- 3. Swept all City streets one time and all major streets twice.

- 4. Swept the downtown 8 times.
- 5. Swept the University area 3 times.
- 6. Cleaned 8 miles of storm pipe.
- 7. Had 4 major and 5 minor snow storms.
- 8. Responded to 207 e-mail and 451 Hot line phone complaints.
- 9. Mowed the entire levee 4 times.
- 10. Mowed approx. 750 acres of right-of-way, City property and drainage ditches.
- 11. Paving of Indiana St. for a water line replacement project.
- 12. Paving 18th St from Naismith to Arkansas.
- 13. Resurfaced 2.5 miles of levee trails.
- 14. Swept 4 cycles.
- 15. Repaired/replaced curbs for micro-surface contract.
- 16. Patched and sealed Ponderosa Dr.
- 17. Patched and sealed Bonanza Dr.
- 18. Took over contract sealing.
- 19. Bardth Ct concrete repair.
- 20. 647 Country Club Terr
- 21. Recycle in place 400 BK of Arkansas
- 22. Recycle in place 900 BK of Arkansas
- 23. Storm sewer relocation at E16th and New Hampshire
- 24. Paved 100 Block of E.16th
- 25. Paved Broken Arrow Park
- 26. Build a salt brine system
- 27. Cleaned the waterway and culvert at 31st St and Kasold
- 28. Put down 63,272 lbs of crack filler
- 29. Concrete patching of E15th St
- 30. Concrete patching of the intersection of Clinton Pky and Inverness
- 31. Removed the traffic islands at Bob Billings Pky and Clinton Pky on Wakarusa
- 32. Repaired the slide area on Centennial Dr south of Harvard
- 33. Did all the street restoration for all the in house Utility Department water line installation
- 34. Overlaid 2.5 miles of Levee Trail

#### PROJECTS IN PROGRESS/PENDING

- 1. Main drive 1141 Haskell (Maintenance Shop)
- 2. Pave 13<sup>th</sup> St from Mass to Tenn.
- 3. Pave W6th Terr.
- 4. Recycle in place 1100 BK E21st St.
- 5. Recycle in place 1100 BK E21st St. Terr.
- 6. Curb repair for 2012 mill and overlay
- 7. Under drain Kasold and Peterson
- 8. 2012 crack seal program
- 9. Replace sidewalks at the Burt Nash Building
- 10. Concrete repair on Holiday Dr.
- 11. Concrete repair Orchard Lane
- 12. Concrete repair Cedarwood Dr
- 13. Concrete repair Ridge Ct

## 14. Concrete repair Harper St.

I am sure that a few more projects will be added to the list before the end of the year and we will be ready to fit them in our schedule. As always, we are ready to do what ever needs done.

## **Some Interesting Numbers.**

Catch Basins Cleared

Feet of Pipe Cleared

Pothole Reports	Total Usage from 1/1 to 12/31
Potholes reported on Hotline & phone	451.00
Potholes reported on Wufoo (on-line reporting)	207.00
Asphalt	Total Usage from 1/1 to 12/31
Number of holes patched	12,575.00
Tons of Hot mix used	664.15
Tons of cold mix used	164.05
Yards of Durapatch used	251.00
Pounds of Crack Sealer used	63,273.00
Sweeping	Total Usage from 1/1 to 12/31
Tons of debris collected	9,232.00
	<del>                                      </del>
Miles Swept	6,642.00
Miles Swept	<del>                                      </del>
	6,642.00
	<del>                                      </del>
Concrete Yards of concrete place	6,642.00
Concrete	6,642.00  Total Usage from 1/1 to 12/31
Concrete Yards of concrete place	6,642.00  Total Usage from 1/1 to 12/31 1,113.25
Concrete Yards of concrete place	6,642.00  Total Usage from 1/1 to 12/31 1,113.25

725.00

983.00



LEVEE RESUFACING





NEW HAMPSHIRE STORM SEWER



RECEIVED
007 1 8 2011
PUBLIC WORKS

Charles F. Soules, P.E.

Director, Public Works

P.O. Box 708

Lawrence, KS, 66044-0708

Dear Chuck,

The undersigned residents of Bardith Court would like to commend the various workers in the street maintenance department for the excellent work in rebuilding our street between September 12<sup>th</sup> and 30<sup>th</sup>, 2011. We have all eagerly awaited this project for some time and are very pleased with the results, but also with how well the project progressed.

Our one-block long cul-de-sac provided many challenges for the workers to maintain access to each house as much as possible while rebuilding the street. The project was planned and executed in an efficient, effective manner with the workers continuing to address the work and make progress each day. The workers were universally pleasant and kept the residents informed about what was coming next. They were courteous about allowing us to drive in and out during the workday, often interrupting their work to accommodate our travels, and even moving trash containers to 27<sup>th</sup> street for pickup. When they left the work area for the day, the street was cleared of debris and work materials, and almost always, access was maintained to each house.

Please know that we are all very pleased with the results of this project and want to express our sincere thanks to all who were involved.

**Bardith Court Residents** 

Wakefield and Doris Dort, 2631 Bardith Court

Kay Traver, 2625 Bardith Court

Mike and Judy Tomei, 2626 Bardith Court

Michael Ch and Justith C.

Brian and Kathy Lewis, 2630 Bardith Court

John and Sara Brandt, 2624 Bardith Court

Brand Cathe Lewis