

# CITY COUNCIL STUDY SESSION

**TO:** Mayor and City Council  
**FROM:** Mari E. Macomber, City Manager <sup>MEM</sup>  
**SESSION DATE:** April 2, 2012  
**TIME:** 4:30 pm  
**PLACE:** Second Floor Conference Room in City Hall

## **AGENDA:**

- **WASTEWATER TREATMENT PLANT UPDATE**
- **PROPOSED 2012 STREET MAINTENANCE PROGRAM**
- **REVIEW CITY COUNCIL AGENDA**
- **REVIEW NEWSLETTER (includes miscellaneous topics)**

## **WASTEWATER TREATMENT PLANT UPDATE**

The Kirksville Wastewater Treatment Plant was constructed in 1976, and upgraded in 1986. It was originally designed as a 5 MGD plant, but has been de-rated by the Missouri Department of Natural Resources to 3.16 MGD. The City's operating permit expired in February 2011.

In March 2011, the City Council approved the execution of an agreement with HDR Engineering of Lee's Summit, Missouri to work with city staff to complete a Facility Plan with an Antidegradation Report for plant improvements. The Facility Plan and supporting documents were expected to be completed within one year. HDR included Klingner Engineering of Hannibal/Quincy and Geosyntec, of Columbia, Missouri to assist them in this work.

We would like to take time on Monday to give the Council an update on where we are in the process. Pat Young, PE, of HDR Engineering and Mark Bross, PE, of Klingner and Associates will present a summary of the work to date during the Study Session.

**Recommendation** – We expect to spend most of our time on Monday discussing this agenda item. At any time, Council members are encouraged to ask questions.

## **PROPOSED 2012 STREET MAINTENANCE PROGRAM**

Each year staff reviews the street program with the Airport and Transportation Commission and the City Council prior to bid letting. We meet with the Airport and Transportation Commission in March but they did not have a quorum so it will be brought back to the April 2 meeting. However, to keep us on track for this year, we are bringing the proposal to the Council on Monday evening.

Determining the priority streets is based on an evaluation of the condition of the streets, using objective criteria. The information is plugged into a program and ratings are established for each street. The program we use is called PAVER, which uses a

pavement condition index (PCI) as the measurement of the street's condition. Included with this packet are two spreadsheets (one for asphalt the other concrete), which include the PCI for various streets. A PCI rating of 75 is good, a rating of 70 is fair, a rating of 46 to 69 is poor, and a rating below is very poor. We separate the streets by their rating and by their street classification (collector and above or residential). Because we were not able to complete all of the streets that had been identified in last year's street program, we moved them forward to this year.

We are no different than the County when it comes to funding for streets. We have a limited amount of funds that we are able to spend each year on street maintenance. Base on the budget, we allocated \$150,000 to curb, gutter and storm drainage, and \$600,000 for asphalt and concrete pavement. We also allocated \$169,000 for asphalt repair equipment, which the Council discussed last week and will consider purchasing at the Council meeting. Aside from the Transportation Sales Tax, the City also budgets funds in the General Fund that are used by the Street Maintenance Division for pothole patching, general street maintenance and equipment purchase.

Attached to this Study Session Packet is a Memorandum from Engineer Ed leans explaining the 2012 Street Program. There will be some additional fine tuning to the program to insure that the City completes the required cash and in-kind match for the Bear Creek 9 Stormwater work. As a reminder the City received a \$300,000 grant to assist in our stormwater work in turn the City agreed to complete matching improvements which included street improvements.

**Recommended Action:** Staff will discuss the project in more detail on Monday. Council will be asked to approve both concrete and asphalt contracts later on this year.

## **REVIEW COUNCIL AGENDA**

### **REVIEW NEWSLETTER – March 30, 2012**

#### Attachments

Staff Report

Street Maintenance Program Staff Report

## **KIRKSVILLE CITY COUNCIL STUDY SESSION ATTACHMENT**

**SUBJECT:** Wastewater Treatment Plant Engineering Update

**STUDY SESSION MEETING DATE:** April 2, 2012

**CITY DEPARTMENT:** Public Works

**PREPARED BY:** John R. Buckwalter, PE Public Works Director

The City's wastewater treatment plant was constructed in 1976, and last upgraded in 1986. It was originally designed to support a population equivalent of 30,000 with a treatment capacity of 5.0 MGD. After 1986 it was derated to 3.16 MGD. The plant's operating permit expired in February 2011. The City applied for a permit renewal in September 2010, and is operating under the limits established by our earlier permit pending issuance of a new permit by the Department of Natural Resource. Changes in environmental law and practice at both the national and state levels have complicated the permitting process.

Discussion with representatives of the DNR and EPA as early as 2008 indicated that the City's new permit would have much tighter limits than the permit issued in 2006. Bear Creek was placed on the 303(d) list of impaired waters, and the Environmental Protection Agency issued a Total Maximum Daily Load (TMDL) with waste load allocations assigned to both the City's wastewater treatment plant and its Municipal Separate Storm Sewer System (MS4). Recent permitting activities have focused on developing an implementation plan for the TMDL which will have achievable and affordable limits spelled out in the plant's operating permit.

In March 2011 Council selected HDR Engineering of Lee's Summit to lead an engineering team to evaluate the existing plant, prepare a Facility Plan outlining options for upgrade or expansion of the plant, and to assist in permitting. The original schedule anticipated completion of the Facility Plan and supporting documents within 365 calendar days (March 15, 2012). The schedule has been delayed as the Missouri DNR works with EPA to establish state-wide limits for key pollutants, and to develop a consistent method for implementing recently issued TMDL's like the Bear Creek document.

The team includes HDR Engineering of Lee's Summit, Klingner and Associates of Hannibal, and Geosyntec of Columbia. City staff and the consultant team have met twice with key Missouri DNR staff at Jefferson City to discuss permitting and TMDL implementation. The most recent meeting was on February 24<sup>th</sup>.

At that meeting DNR clarified the status of the City's permit renewal. A draft permit had been issued on December 30, 2011 for City comment prior to publication for public notice, scheduled for January 2012. There were many issues associated with the draft permit and after consultation with HDR, comments and concerns had been submitted to DNR. The draft permit will not be issued until a TMDL implementation plan and affordability analysis are completed by the City and its consultant team. DNR did,

however, strongly recommend that the City complete a peak flow voluntary compliance agreement prior to completing the TMDL implementation plan. A VCA will protect the City and DNR from EPA action, and will insure that plans to eliminate discharges from the peak flow basin (Outfall #2) are integrated with the Facility Plan and TMDL implementation plan. A resolution authorizing entering a VCA is offered as an action item for the Council's regular meeting of April 2.

Following the February meeting with DNR a schedule for the near term completion of the TMDL implementation plan was developed. A draft implementation plan will be submitted to DNR by June 15<sup>th</sup>. Following receipt of comments from DNR the final TMDL implementation plan will be prepared and submitted by July 20. A revised permit application, publication of public notice, and possibly EPA negotiations on permit limits will follow after July 20<sup>th</sup>.

Parallel to the permitting effort, the team has been working on evaluation of the plant and identification of technical alternatives. Klingner and Associates completed a technical memorandum summarizing the existing wastewater treatment facility evaluation on June 15, 2011. Evaluation of alternatives for handling biosolids (sludge) produced by the plant has been a priority item, and Klingner and HDR met with staff on March 21. The engineering team has continued to refine alternatives for biosolids handling, and will discuss those ideas with Council during the study session. This is a priority issue because the current system is failing. Any repair or replacement of the sludge handling system must be consistent with future plant improvements to avoid spending funds on systems which may have a life of only 3-5 years before needing to be replaced with a different process.

Mr. Pat Young, PE, of HDR Engineering and Mr. Mark Bross, PE, of Klingner and Associates will present a summary of the work to date during the Study Session. Mr. Young will discuss the schedule for completion of the TMDL Implementation Plan, technical aspects of plant improvements, and the preparation of the Facility Plan.

## KIRKSVILLE CITY COUNCIL STUDY SESSION ATTACHMENT

**SUBJECT:** 2012 Pavement Program

**STUDY SESSION MEETING DATE:** April 2, 2012 4:30pm

**CITY DEPARTMENT:** Public Works/ Engineering

**PREPARED BY:** Edward leans, City Engineer

This report discusses the list of streets and budget for the 2012 Street Improvement program. The list of streets are shown on the attached spreadsheets and maps

**Background:** City staff proposes that a total of \$832,232.14 be used for the 2012 Pavement Program. This total is based on spending \$658,635.95 for asphalt and surface treatment, \$75,267 for concrete repair and \$98,329 for Normal Street. This total does not exceed the total allocated budget of \$850,000 from the transportation sales tax fund. A breakdown of the 2012 budget allocates \$600,000 for asphalt, \$150,000 for concrete repair and \$100,000 for Normal Street.

### Streets:

There are several streets that are included in the 2012 pavement program.

For example, Cottage Grove, LaHarpe, Normal and First streets will be milled and resurfaced with a 2 inch overlay. Hamilton and LaHarpe will be treated with micro surface asphalt seal.

Concrete repairs will be made in several places along Normal, Cottage Grove, LaHarpe and Potter Ave.

City forces will patch areas along LaHarpe from Boundary to First St and Shirley St from East St to New St.

These streets were selected on the following criteria set by city council in 2001.

- |                        |              |
|------------------------|--------------|
| 1. Collector and above | PCI<70       |
| 2. Residential         | PCI<46       |
| 3. Collector and above | PCI 70 to 75 |
| 4. Residential         | PCI 46-69    |
| 5. Residential         | PCI 70 to 75 |

### Schedule

City Staff would like to advertise the 2012 Street program for asphalt and concrete on April 5 and open bids on May 1. A notice to proceed will be given to the contractor on May 21, 2012.