



April 20, 2007

TO: Mayor and City Council

FROM: Mari E. Macomber, City Manager *MEM*

SUBJECT: Study Session – **April 24, 2007**

The City Council will convene in Study Session on **Tuesday, April 24, 2007 at 5:30 p.m.** in the Second Floor Conference Room of City Hall.

The following are the agenda items for the Study Session.

- 1. FIRE TRUCK SPECIFICATIONS**
- 2. STORM DRAINAGE REPORT**
- 3. NORTH HIGHWAY 63 TRANSPORTATION STUDY**
- 4. REVIEW NEWSLETTER – April 20, 2007**

1. FIRE TRUCK SPECIFICATIONS

Thirty-one years ago, the City purchased a 1976 Mack Snorkel Truck with an articulating boom. This 30 year old truck has served specific needs of the community through the fire service for many years. Aside from age and maintenance of the vehicle, its ability to reach all buildings in town and the continued development of business and industry have drastically reduced its effectiveness.

In 1992, the City Council submitted to the voters the proposed Quarter Cent Capital Improvement Sales Tax stating that the City would purchase a ladder truck within the first five years of the tax. In 1996, the City Council submitted the renewal of the Quarter Cent Capital Improvement Sales Tax to the voters stating that the City would purchase a fire pumper truck. In both instances the City was able to fulfill this promise. In 2002, the City Council again requested the renewal of the Quarter Cent Capital Improvement Sales Tax with the intent of purchasing an aerial ladder truck. Within one year of the renewal, the City Council was faced with the decision to either purchase a vacated industrial building and control the future use of the space for industrial space, or leave its future to someone else. The Council chose to purchase the building. The City

determined how much money would be available from the Quarter Cent Capital Improvement Sales Tax and made an offer to the company to purchase the building for an amount much less than the actual value of the building. The final payment on this building will coincide with what could have been the final sales tax receipt for the Quarter Cent Capital Improvement Sales Tax, September 2007.

Now that the City has received tremendous support from the citizens for the renewal of this Quarter Cent Capital Improvement Sales Tax, it is important that we begin planning for the use of these funds. Purchasing an aerial ladder truck was the first priority established by the City Council and promoted to the citizens. Fire Chief Randy Behrens and his staff have been working on developing specifications for this truck. The process of purchasing a fire truck is very complicated. The specifications are developed based upon individual department needs and the trucks are not manufactured until an order is placed. The time it takes to receive a truck can be up to one year from the date of order.

The Chief and Assistant Fire Chief Rick Anderson will be at the Study Session on Tuesday to explain the differences between the existing truck and the new truck that will be bid. They will explain some of the more important specifications that will be requested and the process that will be followed to purchase the truck.

We are bringing this item forward to the City Council because of the cost and the life expectancy of this piece of fire equipment. Discussions regarding equipment specifications are not brought forward to a Study Session unless City staff is proposing to make an operational change. Otherwise, vehicle and equipment purchases adhere to City Council policy and are discussed during the City Council retreat in October and then again during budget meetings in late November early December.

Recommendation: The City Council has already identified the acquisition of an aerial ladder truck as its priority for the Capital Improvement Quarter Cent Capital Improvement Sales Tax. There are no recommendations necessary at this time.

2. STORM DRAINAGE REPORT

Another item that was included in the City Council's plan for the Quarter Cent Capital Improvement Sales Tax was funding for storm drainage improvements. Though our community does not have a major waterway within our borders, we do have several drainage basins. Over the years, these drainage basins have been affected by construction and improvements to real property. As we have progressed, we have also established storm sewer requirements for developments. We want to spend time on Tuesday reviewing the drainage basin map of the City, explaining how and where the water flows. As we discuss these basins with the City Council, we will also point out some of the more significant drainage issues that have developed over time. Some of the drainage problems will be the responsibility of the City to address and others are the

responsibility of private property owners. For a few of those solely on private property, it will still be important for the City to be involved to help coordinate the work, as there are multiple single family residences.

One other storm drainage issue that we will discuss with the City Council is the Missouri Department of Natural Resources MS4 storm drainage program. The MS4 is for those municipalities whose storm water systems are separate from their wastewater systems. MS4 stands for Municipal Separate Storm Sewer System. The purpose of this program is for communities to plan, develop and implement activities to effectively minimize nonpoint source pollution created by storm water runoff. Storm water management is the process of controlling and processing rain event runoff in a manner that does not harm the environment or human health. The storm water management program begins with an understanding that every piece of land is part of a watershed. Protecting the watershed and our drinking water supply is one of the goals of this program. Nonpoint source storm water, as the name implies does not have a specific source, it can come from anywhere. Storm water runoff is one example of nonpoint source storm water. Storm water runoff flows across yards and streets before eventually making its way into the local water source. Having a plan to minimize pollutants that eventually flow into the water source is important.

The MS4 was established by the Environmental Protection Agency and actually began with large and medium size communities in the early 1990s as Phase I. Kirksville, Moberly, Columbia and Jefferson City are just a few of those communities affected by Phase II of the storm water program. We will discuss this program with the City Council on Tuesday. Included as an attachment to this cover report is an overview of the MS4 program and its requirements.

Recommendation: Storm water management issues have been discussed previously. The City Council will need to have a general understanding of our drainage basins. As we begin to plan for future storm drainage projects, this information will be used. I would also ask the City Council to consider providing in-kind support to those areas of our community where storm water issues exist and involve multiple single family residences. Finally, support will need to be given to allow for the completion of our a storm water management system to comply with the Missouri Department of Natural Resources MS4 program.

3. NORTH HIGHWAY 63 TRANSPORTATION STUDY

In the Fall of 2005, the City and Missouri Department of Transportation commissioned a corridor study of North Highway 63. The study area included Highway 63 from Route 6 north to Brewington Avenue. The purpose of the study was to determine existing improvement needs and the impacts of development along this portion of roadway. A draft of the study was previously brought forward to both the Airport and Transportation Commission and the City Council. We want to review this final report with the City

Council. We will take this opportunity to highlight the long range plans recommended for this portion of Highway 63.

Public Works Director John Buckwalter has provided a summary of the recommendations of this corridor study in an attached memorandum.

Due to the file size of the Study, we were not able to provide an electronic copy. Photocopies of the document will be provided to the City Council for future reference. A summary of the report had been given to the Airport and Transportation Commission.

Recommendation: This is a project that had been discussed and approved by the City Council. Since the report has been finalized, it is important that City Council members have a copy of the final document.

4. REVIEW NEWSLETTER – April 20, 2007

Attachments

Fire Truck Summary Report – pg. 5

EPA MS4 Fact Sheet – pg. 6

Highway 63 Summary Memorandum – pgs. 7-8

Fire Department Unit 506

Truck 506 is a 1976 Mack Snorkel Truck with an articulating boom. This truck has served the community in elevated rescue operations, ventilating of roofs, and flow of elevated master streams. The height of the current aerial is a bit misleading, although the unit can reach a height of 75', this can only be attained with the placement of the truck within 16' feet of the building. When the Snorkel Truck was originally purchased, an articulating boom made more sense than a straight ladder because of overhead utility lines and building access and height. With utility lines being placed under ground it is not as much of an issue. However due to expansion of facilities, the snorkel truck can no longer access many of the buildings that it did when originally purchased. More specifically we no longer are able to access several of the buildings at NRM, ATSU, and the central part of TSU campus because of streets being closed, additions to, and new construction of buildings.

The purchase of a 100' ladder platform will help us to get full credit with ISO (Insurance Services Office) for aerial devices because of the numerous structures over 3 stories in height in Kirksville. The ladder platform will provide a safety factor by being able to stay out of the collapse zone of many structures. A 100' ladder platform will provide the vertical and horizontal range required by the height of numerous current and anticipated future structures within the City.

Staff has applied for Fire Grants to purchase a 100' ladder platform in the past from the federal government, but we do not meet the requirements because we are considered rural, and ladder trucks are classified as a #3 priority. Because there is so many # 1 & 2 priorities that ladder trucks are not being funded for cities that are in rural areas.

Comparison Articulating Boom Truck versus Ladder Truck

75" Snorkel Platform	100' Ladder Platform
39' Side Reach	100' Side Reach
1000 GPM Pump	2000 GPM Pump
No on Board Water	300 Gal. Water Tank
Set Up In Collapse Zone More Often	Set up in Collapse Zone Less
Often	
No Pre-connected Hand Lines	Pre-connected Hand Lines
Narrow Outrigger Stance	Wider Outrigger Stance

The six MS4 program elements, termed “minimum control measures,” are outlined below. For more information on each of these required control measures, see Fact Sheets 2.3 – 2.8.

- 1 **Public Education and Outreach**
Distributing educational materials and performing outreach to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.
- 2 **Public Participation/Involvement**
Providing opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a stormwater management panel.
- 3 **Illicit Discharge Detection and Elimination**
Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system (includes developing a system map and informing the community about hazards associated with illegal discharges and improper disposal of waste).
- 4 **Construction Site Runoff Control**
Developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb 1 or more acres of land (controls could include silt fences and temporary stormwater detention ponds).
- 5 **Post-Construction Runoff Control**
Developing, implementing, and enforcing a program to address discharges of post-construction stormwater runoff from new development and redevelopment areas. Applicable controls could include preventative actions such as protecting sensitive areas (e.g., wetlands) or the use of structural BMPs such as grassed swales or porous pavement.
- 6 **Pollution Prevention/Good Housekeeping**
Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations. The program must include municipal staff training on pollution prevention measures and techniques (e.g., regular street sweeping, reduction in the use of pesticides or street salt, or frequent catch-basin cleaning).

What Information Must the NPDES Permit Application Include?

The Phase II program for MS4s is designed to accommodate a general permit approach using a Notice of Intent (NOI) as the permit application. The operator of a regulated small MS4 must include in its permit application, or NOI, its chosen BMPs and measurable goals for each minimum control measure. To help permittees identify the most appropriate BMPs for their programs, EPA issued a Menu of BMPs to serve as guidance. NPDES permitting authorities can modify the EPA menu or develop their own list. For more information on application requirements, see Fact Sheet 2.9.

What Are the Implementation Options?

The rule identifies a number of implementation options for regulated small MS4 operators. These include sharing responsibility for program development with a nearby regulated small MS4, taking advantage of existing local or State programs, or participating in the implementation of an existing Phase I MS4's stormwater program as a co-permittee. These options are intended to promote a regional approach to stormwater management coordinated on a watershed basis.

What Kind of Program Evaluation/Assessment Is Required?

Permittees need to evaluate the effectiveness of their chosen BMPs to determine whether the BMPs are reducing the discharge of pollutants from their systems to the “maximum extent practicable” and to determine if the BMP mix is satisfying the water quality requirements of the Clean Water Act. Permittees also are required to assess their progress in achieving their program's measurable goals. While monitoring is not required under the rule, the NPDES permitting authority has the discretion to require monitoring if deemed necessary. If there is an indication of a need for improved controls, permittees can revise their mix of BMPs to create a more effective program. For more information on program evaluation/assessment, see Fact Sheet 2.9.

KIRKSVILLE

M I S S O U R I

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MEMORANDUM:

DATE: April 20, 2007
TO: Mari Macomber, City Manager
FROM: John R. Buckwalter, Director of Public Works
SUBJECT: Highway 63 Corridor Study

On October 24, 2005 the City Council authorized an agreement with MoDOT to jointly fund a transportation study on north Highway 63 (Baltimore) between Route 6 and Brewington. This study was done under the MoDOT Traffic Engineering Assistance Program. George Butler Associates (GBA) was selected by MoDOT to conduct the study. A number of meetings between GBA, City staff, and MoDOT were held, and a final draft of the study was presented in May 2006. City and MoDOT staff felt that the study did not include enough accident data and relied on insufficient traffic counts. Additional data was provided by the City and MoDOT, the study was revised, and the final report was released on October 3, 2006.

The study looked at existing traffic conditions and projections for short term and future development. GBA has identified specific improvements within the study limits of the corridor which should be considered for the existing traffic condition, for the future year 2010 traffic condition, and for the 2025 traffic condition. Their recommendations are summarized below:

Existing Traffic Condition...

- Combine or eliminate drives along the corridor where possible as discussed in the report
- Construct southbound left-turn lane at Charles Street
- No geometric improvements required at intersection of US-63 with Route 6

Future Year 2010 Traffic Condition...

- Construct a three lane section from the US-63 and Route 6 intersection north to the intersection of US-63 and Brewington Avenue
- Begin developing reverse frontage road system parallel to the corridor
- Construct Emmet Street to intersect with US-63, extend Cable Street west to

connect with existing Cable Street

Future Year 2025 Traffic Condition...

- Construct significant geometric improvement at the intersection of US-63 with Route 6 including two through lanes in each direction on US-63. Extend Charles Street from the intersection of US-63 west to the existing Charles Street
- Continue the five lane section from the intersection of US-63 with Route 6 to the intersection of US-63 with Brewington Avenue
- Review signal warrants at the intersection of US-63 with Charles Street; at the intersection of US-63 with Cable Street/Suburban Drive; and at the intersection of US-63 with Brewington Avenue.

In General

The guidelines recommended in the MoDOT Access Management should be followed whenever possible for future development along the corridor in the study area. The guidelines should be used as a minimum for driveway spacing, as well as driveway geometric design. The guidelines should also be used to determine when left turn and right turn lanes should be required as part of the site driveway design permit process.

The Corridor study was discussed at the November ATC meeting. It was noted that this draft incorporated all of MoDOT's comments and addressed most of the concerns the ATC raised during earlier discussion. This included review of another year's worth of data on accidents for the study and additional traffic count on turning movements into local businesses. The Commission discussed the short term issue of recommendations on control of access along Highway 63, but noted that the practicality of this is limited because there is little that can be mandated for established entrances. The short term recommendation to make a three lane section as a minimum from Highway 6 West north to Brewington and the timeframe for this project of 2010 was discussed. Chairman Winkler stated that the three lane area in the highway in front of Home Depot should show the citizens the ease of being able to utilize the middle lane which allows other traffic to continue flowing compared to other areas that become backed up due to the lack of having the additional lane for turning.

Recommendations from the study will be evaluated as the City's 5-year Transportation Sales Tax capital project plan is updated, and as the Staff and Council review and update the Functional Classification Plan for streets and highways within the City.