

# Memorandum

## City of Lawrence

### Engineering

**TO:** Charles Soules, Public Works Director  
**FROM:** Matt Bond, Stormwater Engineer  
**CC:** David Corliss, Cynthia Wagner, Diane Stoddard, Shoeb Uddin, Jonathan Douglass  
**Date:** July 1, 2010  
**RE:** Property Acquisition for Maple Street Pump Station

Please include the following item on the City Commission consent agenda for consideration at the July 6th, 2010 meeting:

**5<sup>th</sup> & Maple Pump Station.** This is a capitol improvement project from the North Lawrence Drainage Study (NLDS) completed in November of 2005. This project was also listed in the public transportation, streets and infrastructure sales tax passed in the fall of 2008. The pump station currently conveying stormwater was originally a sanitary sewer lift station and is undersized for the volume experienced. The existing pump station is located entirely in the Maple Street right-of-way and is southwest of the subject property at 547 Maple.

**Project History.** The NLDS identified the watershed which currently drains to this pump station as System 6 (see attached system map). The existing pump station is a converted sanitary sewer lift station and its current capacity of 38 cubic feet per second (cfs) is grossly undersized. A new pump station with a capacity of 305 cfs was proposed in the NLDS. The purchase of the property at 547 Maple Street would allow ample space for a new pump station. In addition the structure housing the pump station would be designed to fit with the surrounding neighborhood while providing buffer space (see attached aerial map).

**Project Status.** Recently the property at 547 Maple Street became available for purchase. This year's budget includes an amount of \$100,000 specifically for this project. The property at 547 Maple and the adjacent empty lot to the north were appraised at \$100,000. An additional \$15,000 will be used for resident relocation bringing the total property acquisition to \$115,000. Acquisition of the property will aid in the future design work of the pump station by providing known physical sizing parameters. The parcel at 547 Maple is currently zoned as IG which fits zoning for use as a pump station. The parcel immediately to the north is zoned RS7 and would allow for such a use through a special use permit. The northern parcel would either be used for buffer space or as wet well storage for the pump station.

**Project Details.** The project would involve the acquisition of the property and the demolition of existing structures. Refer to the attached map for property location and the size of the contributing watershed. Depending upon sales tax revenue, engineering work could start sometime in 2012 with construction proceeding in 2013 or 2014. The property will sit vacant until the time of construction.

**Project Funding.** The acquisition of this property is included in the infrastructure sales tax spending plan (see attachment).

**Action Request.** Authorize the City Manager to execute contracts for the acquisition of 547 Maple Street and 500 Blk. #5 (the vacant parcel immediately north of 547 Maple) for a total amount of \$115,000.



Water Supply Line  
(blue lines)

15 CMP

Parcel to be  
acquired

600

510

500 BLK #5

532

540

Sanitary Sewer Line  
(purple lines)

Parcel to be  
acquired

15 CMP

18 CMP

15 CMP

601

12 CMP

N 6th St

15 RCP

10 C/P

15 CMP

Maple St

Existing Stormwater Pump Station  
(converted from a sanitary sewer lift station)

Stormwater Line  
(green lines)

8 PVC

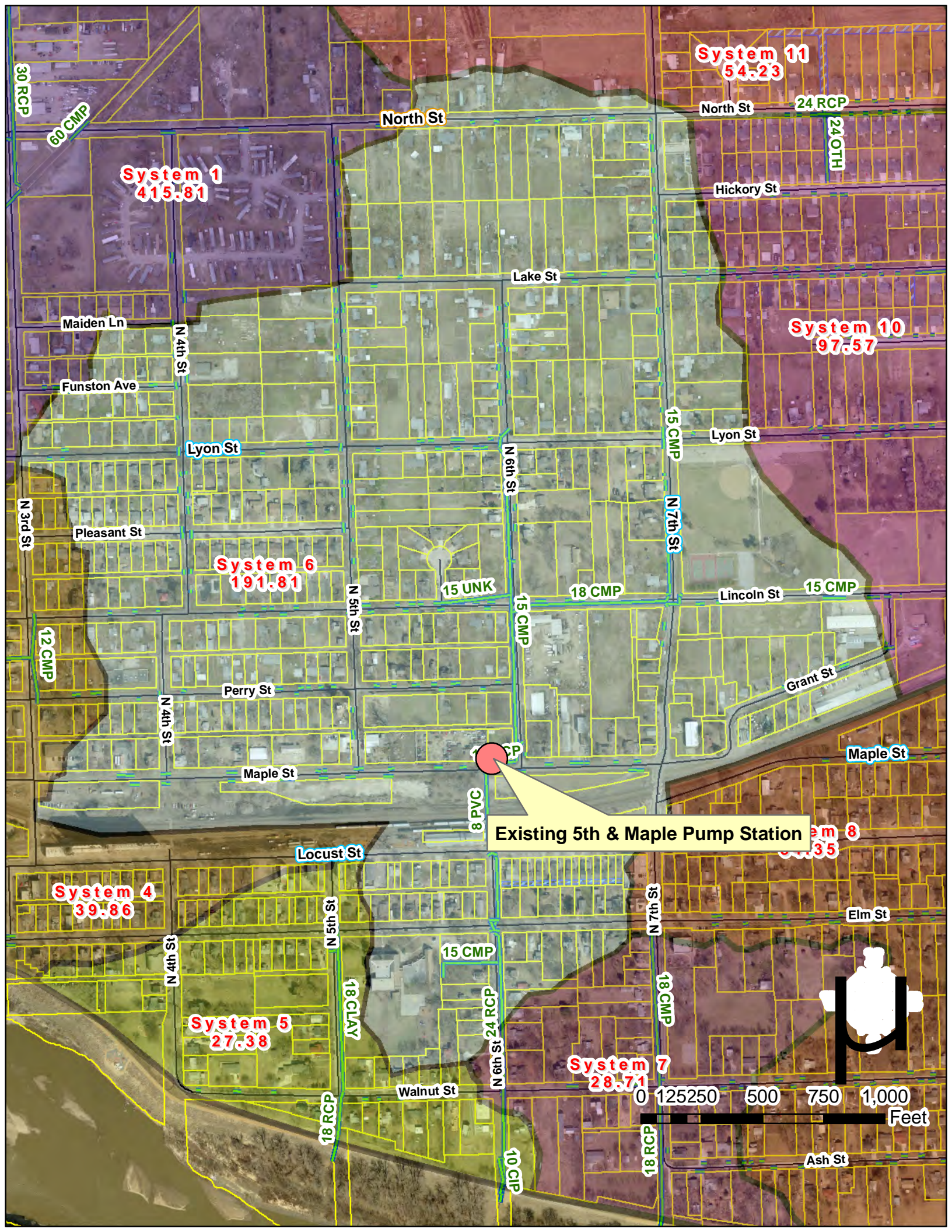
15 CMP



600 BLK #1

0 12.5 25 50 75 100 Feet







REVISED  
Infrastructure Sales Tax  
Revenues and Expenses  
2009-2019 w/Iowa

RESOURCES	Actual 2009	YTD 2010^	Projected 2010	Budget 2011	Budget 2012	Budget 2013	Budget 2014	Budget 2015	Budget 2016	Budget 2017	Budget 2018	Budget 2019	Budget TOTAL
Infrastructure Sales Tax - CI Reserve	\$1,889,133	\$1,440,646	\$3,440,000	\$3,518,800	\$3,599,176	\$3,681,160	\$3,764,783	\$3,850,078	\$3,937,080	\$4,025,822	\$4,116,338	\$1,461,944	\$37,284,313
Infrastructure Sales Tax - Equip Reserve	\$500,000	\$208,333	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$5,500,000
<b>Total Revenue</b>	<b>\$2,389,133</b>	<b>\$1,648,979</b>	<b>\$3,940,000</b>	<b>\$4,018,800</b>	<b>\$4,099,176</b>	<b>\$4,181,160</b>	<b>\$4,264,783</b>	<b>\$4,350,078</b>	<b>\$4,437,080</b>	<b>\$4,525,822</b>	<b>\$4,616,338</b>	<b>\$1,961,944</b>	<b>\$42,784,313</b>

SALE TAX EXPENSES (total proj. cost)	Actual 2009	YTD 2010^	Projected 2010*	Budget 2011*	Budget 2012*	Budget 2013*	Budget 2014*	Budget 2015*	Budget 2016*	Budget 2017*	Budget 2018*	Budget 2019*	Budget TOTAL*	Needed From other sources**
Residential Street Maintenance - (\$5,000,000)	\$280,888		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$210,000	\$4,990,888	\$9,112
Fire Apparatus														
Ladder 2 - (\$1,205,591)		\$500,000	\$500,000											\$705,591
Engine 6 - (\$651,065)		\$500,000	\$500,000											\$151,065
Quint 6 - (\$973,236)				\$500,000										\$473,236
Quint 3 - (\$998,191)					\$250,000									\$748,191
Hazmat 5 - (\$750,000)					\$250,000									\$500,000
Quint 7 - (\$1,106,329)						\$500,000								\$606,329
Quint 5 - (\$1,081,374)							\$500,000							\$581,374
Ladder 5 - (\$1,688,298)									\$1,000,000					\$688,298
Tender 1 - (\$600,000)										\$500,000				\$100,000
Quint 1 - (\$1,247,739)											\$500,000			\$747,739
Total Fire Apparatus													\$5,000,000	\$5,301,823
Burroughs Creek - (\$350,000)	\$188,751	\$161,249	\$161,249										\$350,000	\$0
Kasold - 23rd to 31st - (\$6,500,000)														\$1,000,000 STP
Engineering	\$250,740	\$195,948	\$189,260											\$50,000 Utilities
R/W			\$10,000											
Construction				\$5,000,000									\$5,450,000	\$1,050,000
5th and Maple Pump Station - (\$5,000,000)														
Engineering					\$400,000									
R/W			\$100,000		\$100,000									
Construction						\$2,400,000	\$2,000,000						\$5,000,000	\$0
Iowa - Harvard to Irving Hill Road Overpass - (\$6,050,000)			\$400,000											\$3,000,000 STP
Engineering				\$150,000										\$800,000 Safety
R/W					\$450,000									\$1,250,000 CIP
Construction													\$1,000,000	\$5,050,000
BBP - Crestline to Kasold - (\$3,483,000)														
Engineering					\$300,000									
R/W					\$23,000									
Construction						\$2,900,000							\$3,223,000	\$260,000 Utilities
Wakarusa - BBP to 18th - (\$3,150,000)							\$25,000							
Engineering														
R/W														
Construction								\$2,700,000					\$2,725,000	\$425,000 Utilities
19th - Iowa to Naismith - (\$3,885,500)														
Engineering							\$350,000							
R/W							\$25,500							
Construction								\$2,200,000	\$1,000,000				\$3,575,500	\$310,000 Utilities
Kasold - Harvard to BBP - (\$4,922,000)														
Engineering									\$420,000					
R/W									\$42,000					
Construction										\$3,000,000	\$1,100,000		\$4,562,000	\$360,000 Utilities
Wakarusa - BBP to Legends - (4,663,000)														
Engineering										\$300,000				
R/W										\$23,000				
Construction											\$2,000,000	\$2,100,000	\$4,423,000	\$240,000 Utilities
BBP - Iowa to Crestline (\$5,105,000)											\$400,000			
Engineering											\$10,000			
R/W														
Construction - Phase I												\$2,000,000	\$2,410,000	\$2,695,000
<b>Total Expenses from Infrastructure Sales Tax</b>	<b>\$720,379</b>	<b>\$1,357,197</b>	<b>\$2,360,509</b>	<b>\$6,150,000</b>	<b>\$2,273,000</b>	<b>\$6,300,000</b>	<b>\$3,400,500</b>	<b>\$5,400,000</b>	<b>\$2,962,000</b>	<b>\$4,323,000</b>	<b>\$4,510,000</b>	<b>\$4,310,000</b>	<b>\$42,709,388</b>	<b>\$21,002,758</b>
Revenues over Expenses	\$1,668,754	\$291,782	\$1,579,491	-\$2,131,200	\$1,826,176	-\$2,118,840	\$864,283	-\$1,049,922	\$1,475,080	\$202,822	\$106,338	-\$2,348,057	\$74,924	
<b>Fund Balance Forward Jan 1</b>	<b>\$0</b>		<b>\$1,668,754</b>	<b>\$3,248,245</b>	<b>\$1,117,045</b>	<b>\$2,943,221</b>	<b>\$824,381</b>	<b>\$1,688,663</b>	<b>\$638,742</b>	<b>\$2,113,822</b>	<b>\$2,316,643</b>	<b>\$2,422,981</b>		
<b>Ending Balance Dec 31</b>	<b>\$1,668,754</b>		<b>\$3,248,245</b>	<b>\$1,117,045</b>	<b>\$2,943,221</b>	<b>\$824,381</b>	<b>\$1,688,663</b>	<b>\$638,742</b>	<b>\$2,113,822</b>	<b>\$2,316,643</b>	<b>\$2,422,981</b>	<b>\$74,924</b>	<b>\$74,924</b>	

\* expenses do not reflect total project cost. Instead, only the project expenses to be funded with proceeds from the Infrastructure Sales Tax are shown here.

\*\* Other sources include state and/or federal aid, as well as cash from other funds or other reserve funds, debt financing, etc.

^ Year to date as of May 31, 2010

Assumptions:

.30 for infrastructure and equipment

10 year sunset

first year collections only 7months; last year collections only 5 months