

October 5, 2012

355-211086.2

Scott Schultz, District Manager  
**RWD NO. 4, DOUGLAS COUNTY**  
1768 N 700 Rd.  
Baldwin City, KS 66006

**KDOT PROJECT 10-23 K-8392-04**  
**SOUTH LAWRENCE TRAFFICWAY**  
**UPDATED RELOCATION COSTS**  
**O'CONNELL OPTION – PARTNERING WITH LAWRENCE & BALDWIN**

The purpose of this letter is to present to the District the proposed KDOT relocation reimbursement costs if the District pursues the O'Connell option rather than the Haskell option. A summary of the relocation costs are listed below. Supporting documentation is attached to this letter.

Item	Estimated Cost
1. Connection Fee to Lawrence for O'Connell Main and New Metering Station shared with Baldwin	\$482,663.00
2. Replacement of 1 mile of 8-inch main with 4-inch main	\$145,000.00
3. Engineering expenses to date	\$6,151.78
4. Anticipated remaining engineering expenses	\$10,000.00
<b>Total</b>	<b>643,814.78</b>

Some of the benefits to KDOT of the O'Connell option over the Haskell option are listed as follows:

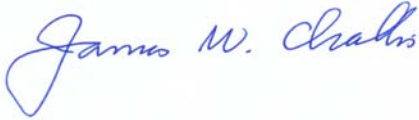
1. KDOT would save money over the Haskell option (\$549,814 - \$482,663 = \$67,151.00).
2. KDOT will not have to deal with two water mains in the Haskell Road Right of Way (DG4's and Baldwin City's) and the construction problems and expense associated with their relocation coordination. KDOT will just have to coordinate one water main at O'Connell which they would have had to deal with anyway.
3. KDOT will not have to provide and pay for new easements required by the Haskell alignment.
4. DG4 and Baldwin City are sharing a metering station rather than constructing two separate facilities.
5. Engineering fees are being reduced since one water main is being designed rather than three separate water mains.

The benefits to the District of the O'Connell option include the following:

1. The District's main will be removed from the Baker Wetlands with all of the maintenance headaches.
2. The District will have a closer connection to Lawrence and all the responsibility of the water main to the connection point will remain with Lawrence.
3. The District should have a higher hydraulic gradient (pressure) at the connection point than it has at this location now and the potential to take more water at this location than it could at its old meter location on Haskell.
4. The O'Connell option should be at no cost to the District as would the Haskell option.

The O'Connell option appears to benefit all parties involved and we would highly recommend this option.

Please call if you have any questions or need additional information.



James W. Challis, P.E.



# City of Lawrence

## UTILITIES

DAVID L. CORLISS  
CITY MANAGER

City Offices  
PO Box 708 66044-0708  
www.lawrenceks.org

6 East 6<sup>th</sup> St  
785-832-3000  
FAX 785-832-3405

### CITY COMMISSION

MAYOR  
ROBERT J. SCHUMM

### COMMISSIONERS

MICHAEL DEVER  
HUGH CARTER  
MIKE AMYX  
ARON E. CROMWELL

September 24, 2012

Mr. Scott Schultz, District Administrator  
RWD No. 4, Douglas County  
1768 N 700 Road  
Baldwin City, Kansas 66006

Re: Utility Relocation for KDOT Project No. 10-23 KA-8392-04  
Relocation of Douglas County Rural Water District No. 4 Metering Station

Dear Mr. Schultz,

At the request of Douglas County Rural Water District No. 4 (RWD #4) and Baldwin City and in an effort to expedite the water main relocation work in conjunction with the SLT project, the City of Lawrence will prepare plans, acquire easements, and construct a 16-inch water main and associated metering station to provide wholesale water service for RWD #4 and Baldwin City on O'Connell Road. The water main and metering station will be operational by June 13, 2013 to meet the KDOT deadline for utility relocations. The fee for the City of Lawrence to provide these services to RWD #4 is \$482,663.

The Lawrence Water System Model 2020 demands in the vicinity of the proposed metering station show RWD #4 and Baldwin City to be 90% of the water demand. Further, the 2020 demands can be met with a 12-inch water main rather than the 16-inch main City is preparing to construct. Thus the fee is calculated from 90% of the cost of the 12-inch water main extension and 100% of the cost of the metering station. The portion of the fee assessed to RWD #4 is based on RWD #4's share of the relocation costs provided to KDOT for RWD #4 and Baldwin City to remain in the Haskell Ave corridor. See the attachment for a breakdown of the fee.

Once KDOT has agreed to the fee presented in this letter, the City will execute a change order to the current engineering contract to include design of the metering station. In addition the City will prepare a funding agreement with RWD #4 to detail deliverables, ownership, and payment associated with the project.

If you have any questions concerning the fee or the cost estimate; please give me a call at 785-832-7862.

Sincerely,



Mike Lawless, P.E.

Assistant Utilities Director - Operations

c: Dave Corliss, City Manager  
Dave Wagner, Director of Utilities



We are committed to providing excellent city services that enhance the quality of life for the Lawrence Community

**Utility Relocation for KDOT Project No. 10-23 KA-8392-04  
Baldwin City & DG RWD #4 - 12-Inch Water Main and Meter Station**

ITEM	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	AMOUNT
1	Mobilization	1	L.S.	\$ 30,000.00	\$ 30,000.00
2	Connect to Existing 12-inch Water Main	1	L.S.	\$ 5,000.00	\$ 5,000.00
3	Contractor Construction Staking	1	L.S.	\$ 15,000.00	\$ 15,000.00
4	Traffic Control	1	L.S.	\$ 15,000.00	\$ 15,000.00
5	Seeding, Fertilizing and Mulching	8,360	S.Y.	\$ 1.50	\$ 12,540.00
6	Temporary Erosion Control	1	L.S.	\$ 8,000.00	\$ 8,000.00
7	12-inch PVC Water Main (In Place)	9,260	L.F.	\$ 45.00	\$ 416,700.00
8	12-inch PVC (RJ) Water Main (In Place)	700	L.F.	\$ 58.00	\$ 40,600.00
9	12-inch Gate Valves	10	Each	\$ 2,000.00	\$ 20,000.00
10	Air Release Valves	2	Each	\$ 4,000.00	\$ 8,000.00
11	Fire Hydrant Assembly	4	Each	\$ 3,325.00	\$ 13,300.00
12	Jacking Pit Excavation/Backfill	2	Each	\$ 19,000.00	\$ 38,000.00
13	Dewatering	1	L.S.	\$ 12,000.00	\$ 12,000.00
14	22-inch Steel Casing (Bored)	275	L.F.	\$ 325.00	\$ 89,375.00
15	22-inch Steel Casing (Open Cut)	200	L.F.	\$ 125.00	\$ 25,000.00
16	Meter Station	1	L.S.	\$ 100,000.00	\$ 100,000.00
17	Meter Station Power	1	L.S.	\$ 15,000.00	\$ 15,000.00
18	Floodplain Fill	1,925	C.Y.	\$ 25.00	\$ 48,125.00
19	12-inch Piping to Metering Station & from Metering Station to Baldwin City Main	200	L.F.	\$ 45.00	\$ 9,000.00
20	8-inch Piping from Metering Station to RWD #4 Main	150	L.F.	\$ 35.00	\$ 5,250.00
21	12-inch Valve (TSV - Connect to Existing Baldwin City 12-inch Main)	1	Each	\$ 3,500.00	\$ 3,500.00
22	8-inch Valve (TSV - Connect to Existing RWD #4 8-inch Main)	1	Each	\$ 2,200.00	\$ 2,200.00
23	Driveway Replacement (4-inch)	160	S.Y.	\$ 12.00	\$ 1,920.00
24	Gravel Road Replacement (6-inch)	2,580	S.Y.	\$ 18.00	\$ 46,440.00
25	Demo Existing Metering Stations & Disconnect Water Main	2	Each	\$ 5,000.00	\$ 10,000.00

Construction Total \$ 989,950.00

Items 17-25 are external to the metering station and connect existing water mains to the metering station, provide power, elevate the metering station above the floodplain, and demo existing meter stations.

Engineering Design \$ 125,000.00  
Easements \$ 15,000.00  
Grand Total \$ 1,129,950.00

Fee Assessed to Baldwin City and DG RWD #4 \$ 1,041,068.50  
(90% of Water Main and 100% of Metering Station)

**Baldwin City Fee \$ 558,405.40**  
**DG RWD #4 Fee \$ 482,663.10**

Haskell Ave Relocation Estimates

Baldwin City Estimate	\$ 636,094.00	53.6%
DG RWD #4 Estimate	\$ 549,814.00	46.4%
<b>Total</b>	<b>\$ 1,185,908.00</b>	

**PRELIMINARY OPINION OF PROBABLE PROJECT COST**

**Douglas County Rural Water District No. 4**

**8" Main Replacement For South Lawrence Trafficway**

**KDOT Project No. 10-23 KA-8392-04**

**Relocated Haskell Avenue Sta 36+00 to Sta 94+50**

20-Apr-12

No.	Description	Quantity/Unit			Price/Unit	Total
1	8" AWWA C909 PVC0 Pipe	5,880	LF	@	25.00 /LF	147,000.00
2	8" RJ AWWA C900 PVC Pipe	810	LF	@	35.00 /LF	28,350.00
3	8" Class 350 DIP	60	LF	@	45.00 /LF	2,700.00
4	16" Steel Casing Pipe - Bored	260	LF	@	200.00 /LF	52,000.00
5	16" Steel Casing Pipe - Open Cut	210	LF	@	80.00 /LF	16,800.00
6	20" HDPE Casing Pipe - Dir. Bore	300	LF	@	300.00 /LF	90,000.00
7	8" GV	2	LF	@	1,000.00 /LF	2,000.00
8	Fittings	1,443	LBS	@	5.00 /LB	7,215.00
9	8" Straddle Block	3	EA	@	1,000.00 /EA	3,000.00
10	Connection - 8" Main - 31st Street	1	EA	@	5,000.00 /EA	5,000.00
11	Connection - 8" Main - South End	1	EA	@	5,000.00 /EA	5,000.00
12	Gravel Road Replacement	30	EA	@	20.00 /EA	600.00
13	Gravel Backfill - Future Pavement	140	EA	@	20.00 /EA	2,800.00
14	Seeding	6,190	LF	@	2.00 /LF	12,380.00
Total Probable Construction Cost						\$ 374,845.00
Construction Contingency (20%)						74,969.00
<b>Subtotal</b>						<b>\$ 449,814.00</b>
Engineering						\$ 55,000.00
Construction Staking						10,000.00
Inspection						35,000.00
Easements						0.00
<b>Subtotal</b>						<b>\$ 100,000.00</b>
<b>Total</b>						<b>\$ 549,814.00</b>

**py**PONZER-YOUNGQUIST  
Engineers & Surveyors

**PRELIMINARY OPINION OF PROBABLE PROJECT COST**

**Douglas County Rural Water District No. 4**

**4" Main Replacement on N 1175 Road - E 1600 RD to E 1500 RD**

**KDOT Project No. 10-23 KA-8392-04**

**Replacement Required to Maintain Chorine Residuals**

18-Jul-12

No.	Description	Quantity/Unit			Price/Unit	Total
1	4" Class 200 PCVC Pipe	5,300	LF	@	12.00 /LF	63,600.00
2	4" RJ Class 200 PVC Pipe	60	LF	@	18.00 /LF	1,080.00
3	4" Class 350 DIP	20	LF	@	25.00 /LF	500.00
4	8" Steel Casing Pipe - Bored	80	LF	@	80.00 /LF	6,400.00
5	8" GV	1	EA	@	1,000.00 /EA	1,000.00
6	4" GV	3	EA	@	600.00 /EA	1,800.00
7	Fittings	200	LBS	@	5.00 /LB	1,000.00
8	Service Relocations	12	EA	@	700.00 /EA	8,400.00
9	4" Straddle Block	1	EA	@	500.00 /EA	500.00
10	Connection - 8" Main - E 1600 Rd	1	EA	@	2,000.00 /EA	2,000.00
11	Gravel Drive Replacement	75	LF	@	20.00 /LF	1,500.00
12	Seeding	5,300	LF	@	2.00 /LF	10,600.00
13	Total Probable Construction Cost					\$ 98,380.00
14	Construction Contingency (20%)					19,676.00
	<b>Subtotal</b>					<b>\$ 118,056.00</b>
	Engineering					\$ 14,000.00
	Construction Staking					2,500.00
	Inspection					10,500.00
	Easements					0.00
	<b>Subtotal</b>					<b>\$ 27,000.00</b>
	<b>Total</b>					<b>\$ 145,056.00</b>

**py** **PONZER-YOUNGQUIST**  
Engineers & Surveyors