

REQUEST FOR COUNCIL ACTION

DATE:	TITLE:		
May 18, 2010	PINE STREET CONSTRUCTION AGREEMENT		
ORIGINATING DEPARTMENT:	TYPE OF ACTION:	<input type="checkbox"/> ORDINANCE	<input type="checkbox"/> RESOLUTION
Administration	<input checked="" type="checkbox"/> FORMAL ACTION	<input type="checkbox"/> OTHER	

RECOMMENDATION:

I recommend that the Council approve the attached contract between the City of Beloit and Mi-Tre Construction.

FISCAL NOTE:

- There is no direct cost associated with this item.

DISCUSSION:

The purpose of this contract is to develop a method for the city to recover our cost from the developer for extending Pine Street.

Respectfully submitted,

Glenn Rodden
City Administrator

AGREEMENT

THIS AGREEMENT entered into this ____ day of May, 2010, by and between the City of Beloit, a duly organized municipal corporation hereinafter referred to as "City" and Michael Cooper and Glada M. Cooper, husband and wife, of Beloit, Kansas, hereinafter referred to as "Cooper".

SUMMARY

This agreement provides for the City constructing 7" non-reinforced concrete pavement (31'-0" b-b) with concrete curb and gutter from 10th Street, north to cul-de-sac as platted in Coopers Addition and installing 18" RCP under new pavement in the north ditch of 10th Street, with Cooper paying for materials and engineering for the project.

The parties hereby agree as follows:

1. The City contemplates that it will complete the construction of concrete curb and gutter as hereinafter defined, by week of October 4, 2010, but agrees to complete the same no later than November, 30, 2010, weather permitting.
2. The City will construct 7" non-reinforced concrete pavement (31'-0" b-b) with concrete curb and gutter from 10th Street, north to cul-de-sac as platted in Coopers Addition and install 18" RCP under the new pavement in the north ditch of 10th Street, as defined in a cost estimate attached hereto marked Exhibit "A" and incorporated herein by reference. The parties acknowledge that the cost of materials and engineering as set forth in Exhibit "A" represents the city engineer's reasonable estimated cost. The City agrees, at its expense, to provide the necessary labor and equipment to complete the project. Cooper agree to reimburse the City for the actual cost of materials and engineering for said project estimated to be \$24,322.00, to be assessed with accrued interest at the rate of six (6) percent per annum, to be levied concurrent with general taxes and payable in ten (10) annual installments, all as more specifically set forth in Exhibit "B", attached

hereto and incorporated herein by reference. The City will pay the remaining costs for the project identified on Exhibit "A" attached hereto and incorporated herein by reference, estimated to be \$46,144.00.

3. The parties agree that upon completion of the project the street, curb and gutter shall be the property of the City. The City agrees to provide Cooper and the public with the use of said street, curb and gutter.

IN WITNESS WHEREOF, this agreement has been executed by the parties hereto on the day and year first above written.

CITY OF BELOIT, KANSAS

Rebecca J. Koster, Mayor
"City"

ATTEST:

Kerry Benson, City Clerk

Michael A. Cooper

Glada M. Cooper
"Cooper"

STATE OF KANSAS,

SS:

COUNTY OF MITCHELL,

BE IT REMEMBERED, That on this ____ day of May, 2010, before me, the undersigned, a notary public in and for the County and State aforesaid, came Rebecca J. Koster, Mayor of the City

Exhibit "A"

Cost Estimate
 Pine Street Extension
 Coopers Addition
 City of Beloit, 2010

Scope: Construct 7" non-reinforced concrete pavement (31'-0" b-b) with concrete curb & gutter from 10th Street, north to cul-de-sac at platted in Coopers Addition. Install 18" RCP under new pavement in north ditch of 10th Street.

Material Description	Column 1 Material cost, et al <u>Benefit District</u>	Column 2 Labor, equip, et al <u>City at Large</u>
8" Concrete Pavement	\$18,900.00	\$37,800.00
2'-6" Concrete Curb & Gutter	\$ 3,084.00	\$ 6,168.00
18" RCP	\$ 1,088.00	\$ 2,176.00
Engineering Plans	\$ 1,000.00	\$ -0-
Construction Staking	<u>\$ 250.00</u>	<u>\$ -0-</u>
 Total	 \$24,322.00	 \$46,144.00

Status	Payment Number	Date	Days	Payment	Interest Payment	Principal Payment	Additional Payment	Balance of Principal
		11/30/2010						46,144.00
	1	12/20/2010	20	6,269.49	151.71	6,117.78		40,026.22
	2	12/20/2011	365	6,269.49	2,401.57	3,867.92		36,158.30
	3	12/20/2012	366	6,269.49	2,175.44	4,094.05		32,064.25
	4	12/20/2013	365	6,269.49	1,923.86	4,345.63		27,718.62
	5	12/20/2014	365	6,269.49	1,663.12	4,606.37		23,112.25
	6	12/20/2015	365	6,269.49	1,386.74	4,882.75		18,229.50
	7	12/20/2016	366	6,269.49	1,096.77	5,172.72		13,056.78
	8	12/20/2017	365	6,269.49	783.41	5,486.08		7,570.70
	9	12/20/2018	365	6,269.49	454.24	5,815.25		1,755.45
	10	12/20/2019	365	1,860.78	105.33	1,755.45		

Community Development Report

May 2010

North Campus Development- The City of Beloit has been working on a contract with the county for Morning View to become a law enforcement center. Once the City completes the contract with the County for Morning View it is anticipated they will be working with other entities that have expressed interest in other buildings on the campus.

We continued discussion with Dr. Hornsby from K-State to discuss ideas for whether the Administration Building could be converted into a Business Incubator. He suggested this be looked at from a regional perspective. This will be discussed at the next North Central Kansas Rural Development Council meeting later this month.

Presented information to the Beloit City Council and Planning Commission about approaching the development of the farmland as a "Planned Unit Development".

North Campus Interests-

We have completed discussions with four large retailers about possibly establishing their businesses on the North campus highway frontage on Highway 24. At this point none of the four have any interest in the site.

We continue to pursue other businesses at this time.

Housing- We are waiting for the U.S. Senate to pass an extension for the federal housing tax credit program before we can move any further with Manske & Associates and the Kansas Housing Resources Corporation. The "option" on the Zimmer Addition property will expire in August. I have spoken with Senator Brownback's office in regard to the Senate bill for the tax credits.

Renewal of the Neighborhood Revitalization Program- I have already started the process to seek renewal of the Neighborhood Revitalization Program from each of the taxing entities participating in the program. The City of Glen Elder has indicated their intentions of renewing the program and has a public hearing scheduled for next month. We have presentations scheduled for the City of Beloit, Cawker City and USD 273.

To date there has been over \$20 million in construction projects approved under this program since it began in October 2006.

NCKTC- I have recently been involved in two meetings with the North Central Kansas Technical College to discuss two different projects. 1) The College has entered into discussions with Ditch Witch to try and develop a program for directional drilling and other unique construction techniques. They are looking at establishing the "Kansas Institute for Underground Construction." 2) I also attended a meeting at the college to hear an update on their discussions with Fort Hays State University. NCKTC is looking at the possibility of "aligning" with FHSU. An alignment would allow both colleges to combine resources and strengthen NCKTC's position in the state. No one would lose their position, salaries and bargaining units would remain the same. The alignment would also enable them to have a combined effort in seeking grants, funds from commerce and greater strength in raising funds in the future for both schools.

Marketing-

The latest economic development brochure has been mailed to 193 site selectors and commercial realtors. The fourth edition of the brochure is currently under development.

Recent Business Activity-

- 1) Jodi Mosher has recently announced plans to move her business "Accents 4 You" into the Struble Photography building on Mill Street.
- 2) Struble's have sold their building and continue to operate their business from their home.
- 3) Ambria Wendell has opened a massage therapy business called 'Rejuvenating Touch by Ambria'. It is located at 1120 N. Highway 14, the building just south of the Solomon Valley Cinema.

Prospective business expansions-

- 1) **April 10-** I was contacted by a business in Mitchell County that is currently waiting to hear back on a contract for products to be manufactured. If they are awarded the contract they may have to hire more people and possibly expand their business.
May Update- Nothing new to report
- 2) **March-16-** I was contacted by a local business person who is interested in putting up a new building to expand their current business. I have put them in touch with several property owners to discuss potential sites for their building. We have talked specifically about the Business Park. They have also expressed interest in a temporary building at BJCF until they have a building constructed. They are looking at a 24,000 sf building.
April update- This person has also inquired about leasing a building on the "North Campus". The City Administrator has been notified.
May Update- This project has been temporarily put on hold.
- 3) **March 10-** I was contacted by a local business person who is interested in putting up a new building to expand their current business. I have put them in touch with several property owners to discuss potential sites for their building. We are also meeting to discuss their business plan and will be setting up a meeting with staff from NCK Regional Planning Commission to discuss possible financial assistance for this project. This would be a significant sized building and could create 2 to 3 new jobs.
April Update- We have met with staff from the Regional Planning Commission and Department of Commerce. There are several sources of tax credits available and financing options available to assist this business development. They have also expressed interest in building in the SVED Business Park and would construct a 50,000 s.f. facility.
May Update- We have not heard anything new from the business owner. We have discussed this further with the Kansas Department of Commerce staff.
- 4) **Plum Creek Meats-** Brett Wichers has purchased the Captains Quarters building. The Neighborhood Revitalization program was utilized. I also provided information to NCK Regional Planning commission on this project.
The name of the business is "Down Under" and they will have a band their April 17, 2010.

Prospective new business developments-

1. **May 14-Project Monument-** On May 14 I submitted an 8 page proposal for a new manufacturing business that was brought to our attention by the Kansas Department of Commerce. The business is seeking a site with 20-30 acres of land. They also sent us their specifications for a building, transportation, utilities, workforce, training and other items they are seeking. Our proposal is currently under review by the Kansas Department of Commerce and the company.

2. **May 11-Project Prevention**- On May 11 I was contacted by a Kansas based organization looking for office space in Beloit. They currently have an office in Concordia. They are planning to close their Concordia office and would like to relocate to Beloit.

3. **May 4-Project Digger**- On May 4 I attended a meeting with a company from the Wichita area that may be striking up a partnership with someone in Beloit. We have discussed some interest in establishing a business location for them in Beloit. Two locations have been discussed

4. **April 16-Project Grain**-On April 16 I contacted a large ag based company from Kansas that I have been in contact with for many years. The point of our contact was to discuss interest in the North Campus Administration Building.

5. **April 13-** I was contacted again by a company interested in establishing a new statewide company that could have a regional office in Beloit. They have recently completed an initial drive to raise capital and have been successful. They are now starting their campaign for private investors and hope to have this completed within a couple of months. We have discussed establishing a regional office in Beloit and will wait to see how their private investors support the business development. We have been working with this business since August 6, 2009.
May—We continue to visit with this company. They are still raising capital.

6. **April 9 & 10-** As a result of the Farm Home and Garden Show on April 9 & 10 I was contacted by two separate retailers from other communities. They have expressed interest in finding locations for their stores in Beloit. At the same time we have a local business interested in sharing space in their store if they can find a retailer compatible with their setting.
May-One of these business people continue to look for a location in Beloit.

Businesses/Organizations requested information or assistance.

Current Month Current YTD '09 YTD

Expansion Plans	0	6	8
Tax Assistance	0	0	0
Marketing/Planning Assistance	0	0	0
Employment Assistance	0	1	1
New Business Prospect	3	18	9

ITEMS FOR COUNCIL DISCUSSION

DATE:

May 18, 2010

TITLE:

WORK SESSION DISCUSSION

DISCUSSION:

Items for discussion at your May 18, 2010 Work Session will include the following:

1. **Paradigm 2000 Review:** Mr. Dick Blodgett will attend the next council meeting to discuss his findings and recommendations that came out of the recently completed Paradigm 2000 study.
2. **Water Project Options:** Mr. Stuart Porter from Schwab-Eaton will attend the next meeting to discuss a proposal for a new water source and for securing the city's water rights. I have also invited members of the Rural Water District No. 3 to attend this meeting in order to discuss with the council their plans for becoming a city water customer.
3. **Airport Leases:** The city attorney, the city airport manager and the city administrator have been working on updated airport leases for the past few weeks and we will discuss our recommendations with the council at the next meeting.
4. **Neighborhood Revitalization Program:** Murray McGee and I will discuss the need to re-authorize the City's Neighborhood Revitalization Program. This is a vital economic development tool for the City of Beloit.
5. **Personnel Policy and Procedures Manual Change:** There has been a request to review the Hours of Work policy in Chapter 2 of the Personnel Policy and Procedures Manual.

Respectfully submitted,

Glenn Rodden
City Administrator

Schwab-Eaton, P.A.

CIVIL ENGINEERS • LAND SURVEYORS • LANDSCAPE ARCHITECTS

April 26, 2010

Mr. Glenn Rodden, City Administrator
City Hall
119 N. Hersey
P.O. Box 567
Beloit, KS 67420

Re: 2010 Water Supply & Rights Study
Beloit, Kansas

Dear Mr. Rodden:

Following are the findings and recommendations from our recent investigation of the City of Beloit's water supply and water rights. Also included as attachments are a preliminary raw water transmission line layout from the Glen Elder Dam to the City of Beloit and associated preliminary cost estimate. Brief discussions of several independent but interrelated issues are included herein with the following headings: Beloit Consumptive Water Rights, Viability of a Water Interconnect with Mitchell Co. RWD #3, Viability of Piping Raw Water from Glen Elder Dam to Beloit, Capacity of Beloit Water Treatment Plant (WTP) and Recommendations.

Beloit Consumptive Water Rights

The City of Beloit's water rights are a fairly complicated issue. The Division of Water Resources (DWR) regulates the amount of water that can be utilized for beneficial use by an individual, company, city, etc. In a nutshell, the City has consumptive rights that total 696 acre-feet (ac-ft) per year [DWR File No.'s MC 2 (322 ac-ft), 2269 (204 Ac-ft), and 10,281 (170 ac-ft)] and storage rights in Waconda Reservoir that total 2000 ac-ft per year. The aforementioned consumptive and storage rights, although somewhat interrelated, are quite different from each other. The consumptive rights (696 ac-ft) are simply the amount of water that the City can divert from the Solomon River for treatment, irrigation and consumption. The 2000 ac-ft storage right is a "pool" of water that the City has access to for the purpose of controlled releases to the Solomon River to help maintain water quality in the River for treatment. The 2000 ac-ft storage right is not a quantity of water that is available for treatment, irrigation or consumption by the City.

The City's 696 ac-ft of annual water appropriation has proven to be an insufficient quantity of water for consumption in the past. As can be seen from the following table, Beloit has over-pumped its consumptive water rights 14 of the past 25 years.

Beloit Water Use (Acre-Ft)

2008	604.9	1999	646.3	1990	*698.0
2007	634.0	1998	679.3	1989	*715.0
2006	*729.2	1997	*714.4	1988	*755.0
2005	*743.6	1996	*741.9	1987	660.0
2004	*722.1	1995	*720.0	1986	681.0
2003	*710.0	1994	*723.0	1985	691.0
2002	*716.7	1993	561.0	1984	686.0
2001	681.1	1992	596.0		
2000	*767.1	1991	*709.0		

** Denotes Year in which Over-Pumping Occurred*

Although over-pumping the City's annual allocation can result in rather harsh fines, there is no reason to panic. DWR is aware that this has been occurring on a fairly consistent basis. We have been told by DWR that the focus in recent years with regards to over-pumping has been to get all water diversions metered. According to DWR, agricultural irrigators have historically been the largest group of over-pumpers, and once all diversions are metered (supposedly in 2010), DWR is going to focus its regulatory energies toward getting over-pumpers back into compliance. What this means for Beloit is that an additional water right application needs to be filed to allow the City to meet current and future water demands.

Viability of a Water Interconnect with Mitchell Co. RWD #3

A potential interconnect with Mitchell Co. RWD #3 (hereinafter called RWD#3 or District) has been discussed between the City and RWD #3 for some time. The District has indicated that they desire to purchase all of their water from the City of Beloit with a contract diversion rate of up to 400 gallons per minute (gpm). The District has used the following amount of water over the past 12 years:

Mitchell RWD#3 Water Use

1998	115.5	Mgal
1999	108.8	Mgal
2000	117.8	Mgal
2001	114.2	Mgal
2002	125.5	Mgal
2003	120.2	Mgal
2004	110.7	Mgal
2005	100.7	Mgal
2006	116.9	Mgal
2007	99.8	Mgal
2008	101.8	Mgal
2009	94.0	Mgal

High = 125.5	Mgal	=	385.1	Ac-Ft
Low = 94.0	Mgal	=	288.4	Ac-Ft
Avg = 110.5	Mgal	=	339.0	Ac-Ft

The City's existing water distribution system would allow an interconnect to RWD#3 without a significant impact in the City's ability to serve existing customers. One logical location for an interconnect is north of the intersections of Hwy's 14 & 24. The City has "looped" 8" water lines in this area that come into the intersection from the south along Hwy 14 and from the east along Hwy 24. This existing distribution system infrastructure would likely provide the desired flow rate without the need for improvements to the City's system.

To make a permanent interconnect with RWD #3 a reality, the following things would need to happen: 1) the City would need to procure additional consumptive water rights, 2) the City would need to modify the existing WTP capacity to meet the peak day demands of the City and RWD #3, 3) the City would need to commit to operating the WTP additional hours each day – especially in the summer time when demands are high, 4) RWD #3 would need to procure necessary easements to install an interconnect pipeline 5) RWD #3 would need to install the interconnect pipeline and a booster pump station to meet their system needs, and 6) both parties would need to agree to a long term water purchase agreement that works for both parties.

Viability of Piping Raw Water from Glen Elder Dam to Beloit

Piping raw water directly from the Glen Elder Dam to the City of Beloit has been an item of discussion for many years, and is a viable project for the City. However, the cost of the project is significant, and the amount of benefit is uncertain. As part of this study, we have sized a raw water line, identified a potential alignment and prepared a preliminary cost estimate for the project (see attached layout map and cost estimate).

One logical question that needs to be answered is how would a raw water pipeline benefit the City of Beloit? Following are some of the known and anticipated benefits:

- Eliminate the need for water quality bypasses during periods of low water flow in the Solomon River. This would ensure that water from the City's storage right is not wasted as bypass downstream of the City's intake works.
- Eliminate water losses in the River between the Dam and City during drought periods. There have been concerns that during dry periods a significant portion of the water released from the Reservoir fails to make it to the City due to evaporation and/or the demands of connected underground aquifers.
- Provide a much more consistent quality of water at the WTP for treatment purposes. Many taste and odor problems with surface water can be attributed to dissolved organic compounds in the water which are also closely associated with highly turbid water. By extracting raw water from a large body of water, such as Waconda Lake, the turbidity should be much more consistent, and the resulting quality of water at the intake of the WTP should be better and more predictable than that found in the Solomon River.

- Reduce the amount of alum, polymers and potentially some other chemicals used in the water treatment process. The amount of reduction is unknown and difficult to predict although reduced turbidity should result in reduced chemical demands.
- The City's 2000 ac-ft storage "pool" in Waconda Reservoir historically fills every year, most often in the spring time. It is conceivable that in an extended period of drought the pool could be depleted if water quality bypasses are used to maintain a consistent quality of water in the Solomon River for treatment. If the pool does not fill in a given year, the amount of water available for release would simply be the amount in the pool at the time. By eliminating the need for water quality bypasses, a pipeline would help ensure that the City's 2000 ac-ft storage pool remain a sufficient storage volume well into the future.
- Keep a modest amount of additional water in Waconda Reservoir that has traditionally been lost due to water quality bypasses. During drought periods, the amount of water that can be retained in the Lake is important to wildlife and recreational activities. Each gallon of water that isn't lost due to water quality bypass is a gallon that would be retained in the Lake. Although probably not significant, there is a regional economic advantage to keeping all of the water possible in the Lake.
- Eliminate the potential for a chemical/livestock contamination event in the Solomon River adversely affecting the City's drinking water supply. A contamination event in the Solomon River would definitely have a much more significant impact on the City of Beloit than the same event in the Waconda Reservoir basin due to the amount of dilution in Waconda Reservoir. In addition, it should be noted that the City's existing River diversion works would remain intact so that water could be extracted from the River in the event of a raw water pipeline break.

Before the above mentioned items related to water *quality* should be used to evaluate the benefits of a raw water pipeline, further investigation is warranted by someone with expertise in the surface water treatment field. We have said from the beginning that surface water treatment is not our area of expertise. A water quality study should be performed if the desired result of installing a pipeline is a noticeable improvement in aesthetic qualities of the treated water (primarily taste and odor).

If a raw water pipeline project is to be pursued, easement acquisition along the selected alignment is a critical component that will have to be addressed. In addition, it needs to be noted that the attached cost estimate does not consider the cost of easement acquisition as the costs associated with easements varies greatly from location to location.

Capacity of Beloit WTP

The Beloit WTP is currently rated at 1.5 million gallons per day (MGD), which is the same as 1050 gpm for a continuous 24 hour period. We have reviewed City WTP records from 2006-2008 to get an indication of how hard the WTP has been "worked" in the past. During that period in the months of June through August, there were several days (in excess of 30) in which the WTP operated between 1.0-1.3 MGD, two days between 1.3-1.4 MGD (specifically 1.35 MGD and 1.38MGD) and one day at 1.49 MGD. In very simple terms, there is little reserve capacity available in the WTP during peak days, although truly peak days appear to occur on a relatively infrequent basis.

The WTP is currently operated at 1050 gpm +/- every time that the plant is in operation. This flowrate is predicated on the City's allowable diversion rate identified in its vested DWR water right MC 2. According to City staff, the WTP's true capacity is unknown because there has never been a need to operate the plant in excess of 1050 gpm. We feel very strongly that an assessment of the capacity of the WTP be performed so that the City has a good understanding of the amount of growth the community can accept with regards to water treatment. This also applies to the City's ability to accept new bulk or large industrial water customers. Without a doubt, the City needs to be cautious about connecting a new large water user before assessing the true capacity of the WTP.

Recommendations

From the beginning, this study was intended to be a "shotgun blast" look at the City's water rights, viability of a raw water pipeline from Waconda Reservoir to the City, the ability of the City to serve RWD #3 with water, and the capacity of the Beloit Water Treatment Plant. Without a doubt, additional study is warranted for some of the topics studied. Following is a list of our recommendations to the City.

1. DWR has indicated that the City should file a new water right application for the City's *current additional needs*, a realistic amount of *future growth*, an allowance for *new bulk customers (i.e. RWD #3)*, and possible *future industrial water users*, such as an ethanol plant. Such an application would likely receive favorable consideration with DWR since a new application would be tied to the City's existing 2000 ac-ft storage right in Waconda Reservoir.

We believe the quantities associated with a new water rights application should be approximately:

70 ac-ft (current additional needs)
+ 170 ac-ft (Future City growth)
+ 470 ac-ft (Mitchell RWD #3)
+ 400 ac-ft (future industrial users)

Total = 1100 ac-ft additional

The above figures are based on historical usage data to meet the City's current needs, 0.5%/year growth factors for Beloit and RWD #3 future needs, and DWR's recommendations for future industrial users. Although this number is quite large compared to the City's existing water rights (696 ac-ft), DWR has indicated that the City needs to address all future water needs in a very conservative nature when pursuing additional water rights.

2. We recommend that the additional infrastructure for RWD #3 to connect to the City for water purchase be the responsibility of the District. We also recommend that the City and District mutually agree to a long term water purchase arrangement so that both party's interests are considered. If the City is required to make improvements to the WTP to meet the additional demands that RWD #3 will impart on the plant, it seems logical that those costs be distributed equitably to those who are benefitting from the improvements. In debating the merits of providing water to

RWD #3, the City should consider that a large portion of the costs of production of water are already in place. By selling a substantial quantity of additional water to others, it is likely the cost of production for each 1000 gallons of water treated could go down which would benefit all of the citizens of Beloit.

3. A raw water line connecting Waconda Reservoir to the City of Beloit is a feasible and worthwhile project. It is also a fairly expensive project. We recommend that the City prioritize the reasons for embarking on such a project. If one of the primary reasons is to improve the aesthetics (primarily taste and odor) of treated water, we suggest a water quality study be completed by a qualified consultant. This type of study should address the chemistry and turbidity of the water currently being extracted from the Solomon River and compare it to the qualities of the water typically found in Waconda Reservoir. We also suggest that if a raw water line project is to move forward, the first step would be to procure easements along the identified alignment. Alternate alignments are possible and should be evaluated before easements are purchased.
4. If Mitchell RWD #3 is going to purchase all of its water from the City of Beloit, some additional WTP capacity will be needed to meet each entity's peak day usage. It is very possible that there is reserve capacity built into the WTP that hasn't been utilized in the past. We suggest that a qualified engineering firm study the capacity of the existing plant to determine if there are individual plant components that limit water production capabilities. A capacity study should also identify improvements needed to increase the capacity of the WTP to at least 2.1 MGD.

There is a considerable amount of information we have reviewed as part of this study. In addition, virtually all of the items addressed herein are interrelated at some level. If you have any questions or need clarifications about this study, please don't hesitate to call me.

Sincerely,

SCHWAB-EATON, P.A.

A handwritten signature in black ink, appearing to read "Stuart Porter", written in a cursive style.

Stuart Porter, P.E.

GLEN ELDER DAM TO BELOIT RAW WATER TRANSMISION LINE

PRELIMINARY COST ESTIMATE
 WATER SUPPLY STUDY
 CITY OF BELOIT, KANSAS

ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	14" DR 25 C905 PVC RAW WATER LINE	61400	LF @	22.50 =	\$1,381,500.00
2	CONNECT TO EXISTING 16" WL AT DAM	1	LS @	5000.00 =	\$5,000.00
3	CONNECT TO BELOIT WTP RAW WATER PIPING	1	LS @	5000.00 =	\$5,000.00
4	RAW WATER PUMPING STATION	1	LS @	105000.00 =	\$105,000.00
5	14" MJ BFV W/ VALVE BOX	5	EA @	3500.00 =	\$17,500.00
6	14" COUNTY ROAD / DRIVEWAY CROSSING	10	EA @	4000.00 =	\$40,000.00
7	14" PAVED ROAD CROSSING	4	EA @	12000.00 =	\$48,000.00
8	14" RAILROAD CROSSING	1	EA @	25000.00 =	\$25,000.00
9	14" STREAM CROSSING	3	EA @	16000.00 =	\$48,000.00
10	DIRECTIONAL BORE 14" PVC WATER LINE	700	LF @	80.00 =	\$56,000.00
11	RAW WATER LINE CLEANOUT	1	EA @	4000.00 =	\$4,000.00
12	PUMP STATION TELEMETRY SYSTEM	1	LS @	15000.00 =	\$15,000.00
					\$1,750,000.00
+ 10% CONTINGENCIES					= \$175,000.00
SUBTOTAL CONSTRUCTION					\$1,925,000.00
OVERHEAD COSTS					
1	ENGINEERING	(6.7%)			\$129,000.00
2	INSPECTION	(3.4%)			\$65,400.00
3	LOAN ADMINISTRATION	L.S.			\$10,000.00
SUBTOTAL OVERHEAD					\$204,400.00
TOTAL PROJECT COST					\$2,129,400.00

DRAFT
4/26/10

SCOPE OF SERVICES

City of Beloit, Kansas

Water Supply and Water Treatment Plant Assessment

The ENGINEER agrees to furnish and perform the various engineering and technical services for the PROJECT, which includes: a review and assessment of various water quantity, quality and treatment plant physical conditions relating to the City of Beloit Water Supply and Water Treatment Plant. The primary areas of assessment will be as follows:

- **Water Quantity:** The assessment will review existing and potential customer water use information; existing and potentially necessary water rights information.
- **Water Quality:** The assessment will review raw and treated water quality data for the Solomon River and Beloit WTP. A review of both raw and treated water quality data for Lake Waconda and the RWD No. 2 Mitchell County WTP will be provided to address potential comparisons of the two water sources.
- **City of Beloit WTP Physical Condition Assessment:** An item-by-item review of individual water treatment plant components will be conducted to assess the physical condition, capacity, and the potential need for improvements.

A. WTP QUANTITY, QUALITY & PHYSICAL CONDITIONS ASSESSMENT

Task 100 – General Activities

The Assessment will include the following general activities:

1. Provide project coordination including:
 - a. Coordinate project activities, including status meetings, meetings with staff, budget, schedule, and communications to keep the City informed of the progress throughout the duration of the project.
 - b. Arrange for meetings with staff familiar with management, operation, and maintenance practices.
 - c. Provide summary documents of meetings and correspondence.
 - d. Maintain Project Documents.
 - e. Plan and conduct project meetings
 - f. Conduct kick-off meeting.
 - g. Conduct a single 2-day workshop including a review of daily operational procedures currently utilized during the different seasons of the year and during peak demand periods.
 - h. Conduct two (2) onsite progress meetings.
 - i. Present findings to the City and/or regulatory/funding agencies (if requested)

2. Obtain existing O & M Manual drawings and data, engineering design drawings, previous reports, facility plans, sample and laboratory data, and other data necessary to conduct assessments.
3. Develop working schematics, maps and process diagram(s) of the current configuration of the water treatment plant for use during analysis and to include in the Report.

TASK 200 – Assessment of Water Quantity/Use Issues

1. Provide a review and/or confirmation of existing and potential customer water usage for the City of Beloit, RWD No. 1 Mitchell County, and RWD No. 3 Mitchell County.
2. Review existing and future water rights needs based upon findings of Task 200, Item No. 1 above.

TASK 300 – Assessment of Water Quality Issues

1. Conduct a review of water quality issues relating to the City of Beloit water treatment plant. Review operational/permit reporting data submitted to KDHE for the same review period. Specific activities are to include:
 - a. Review of raw water quality parameters from the Solomon River including, but not necessarily limited to: turbidity; Giardia & Cryptosporidium testing; Atrazine levels; etc.
 - b. Review of treated water quality parameters from the Beloit WTP including, but not necessarily limited to: TOC reduction; THM levels; HAA5 levels; etc.
2. Conduct a review of water quality issues relating to a potential connection to Lake Waconda. Review operational/permit reporting data submitted to KDHE for the period (subject to records being made available by RWD No. 2 Mitchell County. Specific activities would include:
 - a. Review of available raw water quality sampling data and testing data from Lake Waconda including, but not necessarily limited to: turbidity; TOC; Giardia & Cryptosporidium testing; Atrazine levels; etc.
 - b. Review of available treated water quality parameters from the RWD No. 2 Mitchell County WTP including, but not necessarily limited to: TOC reduction; THM levels; HAA5 levels; etc

TASK 400 – Assessment of Physical WTP Conditions and Capacities

1. Organize and coordinate a two day, on site, workshop. PEC and SE staff during workshop would include: 3 PEC process & chemical employees for 2 days; 1 PEC electrical/control employee for 1 day; 1 SE employee for 2 days. Workshop activities would be directed to:
 - a. Conduct a detailed inspection, with City staff, to assess the condition of individual process components, transfer piping, valves, controls, and electrical systems.
 - b. Conduct a review of existing chemical feed and control systems.
 - c. Conduct a review of electrical/instrumentation/control system reliability and redundancy. Determine abilities to manually operate segments of the treatment plant.
2. Provide an item-by-item review of existing water treatment plant components to determine individual current capacities, as well as the potential for expansion to meet additional needs.
3. Provide a review of daily operational procedures currently utilized during the different seasons of the year and peak demand periods. Review all operational costs over the past 5 year period.
4. Generate planning level concepts and methods for modifying or reconfiguring segments of the existing water treatment facility to:
 - a. Assure compliance with current and anticipated KDHE and EPA regulatory requirements for treatment processes, finished water quality, and process residuals handling.
 - b. Review current local, county, state codes that might impact the implementation of facility modifications. Identify various regulations that may impact the treatment system.
 - c. Review current operational practices and compliance with current and projected codes/regulations.
 - d. Attend meeting with KDHE (if required).
 - e. Maximize finished water production and treatment efficiency.
 - f. Reduce operational, maintenance, reliability, capacity, and redundancy issues to a more manageable level.

TASK 500 – Assessment Report Preparation

1. Provide a written Assessment Report to: (a) summarize all data and information used to determine the most applicable and cost effective changes and; (b) delineate modifications to the existing water supply and water treatment facilities to make it capable of meeting the City's water quality and water production needs. The Report will provide findings, conclusions and recommendations to support City CIP planning and implementation.
2. Provide for the development of design criteria, concept processes, and piping configurations (schematics) for proposed water supply and treatment system improvements.
3. A draft version of the Report will be submitted to the City for review and comment. Drawings will be provided in PDF or AutoCAD format if requested.
4. If requested, the Report will be presented to the City Council prior to final publication.

B. IMPROVEMENT DESIGN

If requested by the OWNER, and following execution of a mutually agreed upon Supplemental Agreement, the ENGINEER will provide design services for the improvements recommended in the study phase and/or selected by the Owner.

C. CONSTRUCTION ADMINISTRATION

If requested by the OWNER, and following execution of a mutually agreed upon Supplemental Agreement, the ENGINEER will provide services during the construction phase(s) of the PROJECT for Contract Administration and/or Resident Engineering.

D. TIME OF PERFORMANCE

Time of performance for the Assessment and Study Phase Services is covered in EXHIBIT C. Time of performance for Improvement Design and Construction Administration services shall be as established by Supplemental Agreement.

E. SUPPLEMENTAL SERVICES

Any work requested by the OWNER that is not included in the Basic Services

will be classified as Supplemental Services. Supplemental Services shall include, but not be limited to, the following:

1. Changes in the general scope, extent, or character of the project or its design, including but not limited to changes in size, complexity, Owner's schedule, character of construction or method of financing; and revising previously accepted studies, reports, or design documents when such revisions are required by changes in laws, regulations, ordinances, codes, or orders enacted subsequent to the preparation of such studies/reports/documents or design or due to any other causes beyond the ENGINEER's control.
2. Design of improvements resulting from the completion of the Assessment Study, including Construction Document preparation and Bid Phase Services.
3. Construction Administration and/or Construction Phase Services associated with the design of improvements recommended in the Assessment.
4. Geotechnical engineering services.
5. Assistance for and/or acquisition of permits including but not limited to USACE permits and specific NPDES permits.
6. Easement acquisition/negotiation services.
7. Preparation of applications and/or administration of daily activities for grant, loan or other funding programs.
8. Creation of and/or working with computer hydraulic models.
9. Analysis of the raw water intake and pumping.
10. Analysis of distribution system needs and deficiencies beyond that required to address water source and WTP investigations.
11. Structural analysis.
12. Water source, water well testing, and/or evaluation.
13. Preparation for and/or attendance at public meetings/hearings other than those specifically listed in the scope of services.
14. Operations and Maintenance Manuals.
15. Any need, currently unknown, which the OWNER shall designate.

SUBJECT: HOURS OF WORK

PURPOSE:

To establish a policy setting uniform hours of work for employees.

STATEMENT OF POLICY:

Except as otherwise provided, the normal working hours for employees are eight (8) hours, from 8:00 a.m. to 5:00 p.m., with a one (1) unpaid hour lunch period. This does not include personnel engaged in shift work. Employees are expected to be at their work location and ready to begin work at the beginning of their work schedule.

Except as otherwise provided, the normal working hours for police personnel are twelve (12) hour shifts. Employees are expected to be at their work location and ready to begin work at the beginning of their work schedule.

Employees shall receive a rest period of not less than fifteen (15) minutes for each four (4) hour work period. Rest periods shall be scheduled as near as possible to the midpoint of each four (4) hour work period.

All rest breaks and meal breaks shall be arranged by the employee at the discretion of her/his supervisor.

The standardization of working hours is necessary to provide:

- A. Continuity in access by and service to the citizenry;
- B. Facilitation of teamwork; and
- C. Facilitation of supervisory assistance.

Occasions may arise when the service to the citizen can be improved through the adjustment of an employee's work hours by the Department Head.

Individual requests for adjustment of working hours for personal reasons must be evaluated in light of the effect of the criteria enumerated in items A-C above.

Advance notice of anticipated tardiness is expected; notice of unavoidable tardiness is expected, when possible. Tardiness must be made up during the pay period in which it occurs. Frequent tardiness or other attendance irregularities may be cause for disciplinary action.

Daily attendance records will be maintained by each department, including date and time absent and reason for absence. Attendance shall be a consideration in determining promotions, transfers, satisfactory completion

of training periods, and continued employment with the City.

Unexcused failure to report for work for a period of five days will be deemed a resignation.

Hours for part-time and certain employees may vary from the normal office hours noted above due to the nature of their duties and will be determined by the appropriate Department Head, with concurrence of the City Administrator.