

Wednesday, November 4, 2015
8:00AMCity Hall, Council Chambers
23 N 2nd Street**AGENDA****COMMISSION
MEMBERS**ADAM WEBSTER
VICE-CHAIRPERSON
TERM EXP. 2020SCOTT BORCHARDT
TERM EXP. 2017DALE ARTHUR
TERM EXP. 2019BILL ERICKSON
CHAIRPERSON
TERM EXP. 2018BILL PAULSON
TERM EXP. 2016“WINTER,
SPRING,
SUMMER, FALL...
TOMAHAWK
HAS IT ALL”

1. **CALL TO ORDER**
2. **PUBLIC COMMENTS** (During this item on the agenda the Commission listens to oral comments from members of the public on non-agenda items. When speaking please state your name and limit your time to five minutes.)
3. **MINUTES**
 - a. September 29, 2015
4. **CHECKS** – 15562 – 15608 in the amount of \$1,024,354.75
5. **FINANCIAL REPORT** – October 20, 2015
6. **OLD BUSINESS**
 - a. Capacity, Management, Operation and Maintenance (CMOM) Report
 - b. Waste Water Projects
 - Waste Water Plant Updates
 - Collection System/Rehabilitation Updates
 - Sale of Sewer Jet
 - Controls Upgrades
 - Backhoe Purchase
 - Change Orders
7. **DIRECTOR’S REPORT**
 - a. **MEETING DATES** – November 24, 2015
8. **ADJOURN**

Any additions to this agenda will be added to the original posted at City Hall. Any person who has a qualifying disability as defined by the American’s with Disabilities Act, that requires the meeting or materials at the meeting to be in an accessible location or format must contact the Clerk-Treasurer at City Hall, 453-4040, at least three days prior to the meeting so any necessary arrangements can be made to accommodate each request.

PLEASE TURN CELL PHONES ON SILENT DURING MEETINGS

City of Tomahawk

P.O. Box 469, Tomahawk, WI 54487
(715) 453-4040 phone (715) 453-2717 fax
www.cityoftomahawk.com

Date: October 20, 2015

To: Members of the Tomahawk Water and Sewer Utility Commission
From: Amanda L. Bartz, Clerk-Treasurer
Subject: Non-Audited Financial Report

Total Treasurer's Cash Last Report September 21, 2015)	\$	176,943.59
Credits- Cash Receipts/Transfers	\$	132,327.70
Debits - Checks 15562 -15608	\$	(430,348.31)
Total Treasurer's Cash October 20, 2015	\$	(121,077.02)
1st Merit Saving Account	\$	55,670.05
State Local Government Investment Pool	\$	326,561.70
Total Cash Available	\$	261,154.73

Fund Balances:

Equipment Replacement Fund	\$	334,286.13
Clean Water Debt Fund	\$	177,912.85

Debts:

		Balance
Clean Water Fund - Matures 2035 - Interest 2.363%	\$	3,354,250.00
Next Payment \$ 137,865.94 Date 5/1/2016		
S. Tomahawk Ave. - Matures 2022 - Interest 2.250%	\$	143,640.00
Next Payment \$22,648.95 Date 4/1/2016		
N. 4th St Utilities/River Crossing - Matures 2028 -1.250%	\$	4,195,000.00
Next Payment \$ 331,421.88 Date 4/1/2016		

Total Debt	\$	7,692,890.00
Due to General Fund from Water	\$	322,702.70
Due to General Fund from Sewer	\$	60,553.67

We, the members of the Tomahawk Water and Sewer Utility Commission, have examined to the extent we feel necessary, and approve the above numbered checks with a value of :
\$ 430,348.31

Fund: 610 - WATER FUND

Account Number		2015		2015 Budget	Budget Status	% of Budget
		2015 October	Actual 10/20/2015			
610-00-44180-000-000	NON OPERATING RENTAL	0.00	0.00	0.00	0.00	0.00
610-00-44190-000-000	INTEREST AND DIVIDEND INTEREST	0.00	232.36	200.00	32.36	116.18
610-00-44191-000-000	INTEREST SPECIAL ASSESSMENTS	0.00	0.00	4,234.51	-4,234.51	0.00
610-00-44192-000-000	CAPITAL CONTRIBUTIONS	0.00	0.00	0.00	0.00	0.00
610-00-44210-000-000	MISC. NON-OPERATING INCOME	0.00	-20.00	200.00	-220.00	-10.00
610-00-44290-000-000	AMORTIZATION OF DEBT PREMIUM	0.00	0.00	0.00	0.00	0.00
610-00-44601-000-000	BULK WATER SALES	0.00	0.00	0.00	0.00	0.00
610-00-44611-000-000	RESIDENTIAL WATER	362.60	146,969.57	200,000.00	-53,030.43	73.48
610-00-44612-000-000	MULTI FAMILY RESIDENTIAL WATER	0.00	6,286.43	3,500.00	2,786.43	179.61
610-00-44613-000-000	COMMERCIAL WATER	144.78	64,192.44	95,000.00	-30,807.56	67.57
610-00-44615-000-000	INDUSTRIAL WATER	0.00	49,774.16	80,000.00	-30,225.84	62.22
610-00-44617-000-000	PUBLIC AUTHORITY WATER	164.76	10,687.28	12,000.00	-1,312.72	89.06
610-00-44619-000-000	INTERDEPARTMENTAL WATER	0.00	0.00	0.00	0.00	0.00
610-00-44620-000-000	PRIVATE FIRE -WATER	0.00	8,486.67	12,000.00	-3,513.33	70.72
610-00-44630-000-000	PUBLIC FIRE PROTECTION	18,301.75	183,017.50	219,621.00	-36,603.50	83.33
610-00-44700-000-000	CUSTOMER FORFEITED PENALTIES	-1.05	16,483.54	25,000.00	-8,516.46	65.93
610-00-44710-000-000	MISC. SERVICE REVENUE	0.00	0.00	500.00	-500.00	0.00
610-00-44720-000-000	WATER TOWER RENT	1,980.00	34,411.54	39,000.00	-4,588.46	88.23
610-00-44740-000-000	MISC. WATER REVENUE	0.00	808.38	1,000.00	-191.62	80.84
610-00-44741-000-000	RECONNECTS -MISC. SERVICE	80.00	962.00	500.00	462.00	192.40
LICENSES AND PERMITS		21,032.84	522,291.87	692,755.51	-170,463.64	75.39
610-10-49200-000-000	TRANSFER	0.00	0.00	0.00	0.00	0.00
DONATIONS		0.00	0.00	0.00	0.00	0.00
Total Revenues		21,032.84	522,291.87	692,755.51	-170,463.64	75.39

Fund: 610 - WATER FUND

Account Number		2015		2015 Budget	Budget Status	% of Budget
		2015 October	Actual 10/20/2015			
610-00-57080-000-000	TAXES	5,507.92	55,079.20	66,095.04	11,015.84	83.33
610-00-57081-000-000	TAXES -FICA	575.98	6,112.93	7,168.34	1,055.41	85.28
610-00-57343-000-000	ASSET:DISTRIBUTION MAINS	0.00	0.00	0.00	0.00	0.00
610-00-57345-000-000	NEW SERVICES	0.00	0.00	0.00	0.00	0.00
610-00-57346-000-000	METERS	0.00	0.00	0.00	0.00	0.00
610-00-57390-000-000	ASSET:STRUCTURES & IMPROVEMENT	0.00	0.00	0.00	0.00	0.00
610-00-57392-000-000	ASSET: TRANSPORTATION EQUIPMNT	0.00	0.00	0.00	0.00	0.00
610-00-57394-000-000	TOOLS,SHOP & GARAGE EQUIP	0.00	0.00	0.00	0.00	0.00
610-00-57403-000-000	DEPRECIATION	0.00	36,106.98	0.00	-36,106.98	0.00
610-00-57404-000-000	Contributed Deprec (Non-Op)	0.00	15,406.50	0.00	-15,406.50	0.00
610-00-57427-000-000	PRINCIPAL ON DEBT	0.00	0.00	93,425.00	93,425.00	0.00
610-00-57428-000-000	AMORTIZATION OF DEBT DISCOUNT	0.00	0.00	0.00	0.00	0.00
610-00-57431-000-000	INTEREST ON DEBT	0.00	40,107.43	40,107.43	0.00	100.00
610-00-57600-000-000	OPERATING SUPERVISION	2,201.45	44,715.27	38,860.10	-5,855.17	115.07
610-00-57602-000-000	S.O.S.-Misc supplies	197.23	6,299.26	10,000.00	3,700.74	62.99
610-00-57605-000-000	MAIN OF WATER SOURCE PLANT	10.79	199.39	3,000.00	2,800.61	6.65
610-00-57620-000-000	OPERATION LABOR-POWER/PUMPING	0.00	469.56	8,850.00	8,380.44	5.31
610-00-57622-000-000	FUEL/POWER FOR PUMPING	1,844.94	18,096.50	25,000.00	6,903.50	72.39
610-00-57623-000-000	OPERATION SUPPLIES & EXPENSES	0.00	1,633.72	500.00	-1,133.72	326.74
610-00-57624-000-000	PUMP LABOR & EXPENSE	0.00	0.00	0.00	0.00	0.00
610-00-57625-000-000	MAINTENANCE OF PUMPING PLANT	310.09	2,632.77	4,150.00	1,517.23	63.44
610-00-57630-000-000	OPERATION WATER TREATMNT-LABOR	0.00	692.22	885.00	192.78	78.22
610-00-57631-000-000	WATER TREATMENT -CHEMICALS	0.00	20,058.47	44,000.00	23,941.53	45.59
610-00-57640-000-000	OPERATING LABOR-TRANS/DIST FAC	0.00	803.08	4,425.00	3,621.92	18.15
610-00-57641-000-000	TRANS& DISTR. SUPPLIES/EXPNS	274.99	11,387.81	4,000.00	-7,387.81	284.70
610-00-57642-000-000	WATER TREATMENT OPERATION	0.00	0.00	0.00	0.00	0.00
610-00-57650-000-000	MAINT DIST RESERVOIR/STANDPIPE	1,358.00	2,239.89	9,885.00	7,645.11	22.66
610-00-57651-000-000	MAINTENANCE OF MAINS	13,132.04	39,609.29	50,000.00	10,390.71	79.22
610-00-57652-000-000	MAINT SERVICE	0.00	9,337.02	15,000.00	5,662.98	62.25
610-00-57653-000-000	MAINTENANCE OF METERS	178.88	7,177.75	36,850.00	29,672.25	19.48
610-00-57654-000-000	MAINTENANCE OF HYDRANTS	190.86	4,515.48	10,000.00	5,484.52	45.15
610-00-57655-000-000	MAINTENANCE OF OTHER PLANT	0.00	0.00	0.00	0.00	0.00
610-00-57676-000-000	MAINT OF METERS	0.00	439.38	0.00	-439.38	0.00
610-00-57677-000-000	MAINT OF HYDRANTS	0.00	0.00	0.00	0.00	0.00
610-00-57901-000-000	METER READING LABOR	313.04	3,765.01	10,509.38	6,744.37	35.83
610-00-57902-000-000	ACCOUNTING AND COLLECTION LABO	2,077.82	20,778.20	24,933.84	4,155.64	83.33
610-00-57903-000-000	SUPPLIES, MERER READ, BILLING	118.18	1,036.01	5,000.00	3,963.99	20.72
610-00-57904-000-000	Cust A/C - Uncollectibel Accts	0.00	0.00	0.00	0.00	0.00
610-00-57920-000-000	ADMIN & GEN SALARY, CITY HALL	306.00	1,152.00	1,080.00	-72.00	106.67
610-00-57921-000-000	OFFICE SUPPLIES & EXPENSE	0.00	5,549.97	25,000.00	19,450.03	22.20
610-00-57923-000-000	OUTSIDE SERV-ENGINEER, WTR TEST	1,548.82	9,632.66	20,000.00	10,367.34	48.16
610-00-57923-001-000	ADMIN & GEN--OUTSIDE SERV	0.00	0.00	0.00	0.00	0.00
610-00-57924-000-000	INSURANCE EXPENSE	0.00	3,841.51	9,500.00	5,658.49	40.44
610-00-57926-000-000	EMPLOYEE PENSIONS & BENEFITS	3,869.92	40,150.52	66,597.21	26,446.69	60.29
610-00-57928-000-000	REGULATORY COMMISSION	570.11	570.11	1,000.00	429.89	57.01
610-00-57930-000-000	MISC GENERAL EXPENSE	0.00	5,865.65	6,000.00	134.35	97.76
610-00-57933-000-000	TRANSPORTATION EXPENSE	491.65	3,772.98	5,500.00	1,727.02	68.60
CAPITAL OUTLAY		35,078.71	419,234.52	647,321.34	228,086.82	64.76
610-00-59000-000-000	OTHER FINANCING USES	0.00	0.00	0.00	0.00	0.00
610-00-59200-000-000	INTERFUND TRANSFER	0.00	0.00	0.00	0.00	0.00

Fund: 610 - WATER FUND

Account Number	2015 October	2015 Actual 10/20/2015	2015 Budget	Budget Status	% of Budget
OTHER FINANCING USES	0.00	0.00	0.00	0.00	0.00
Total Expenses	35,078.71	419,234.52	647,321.34	228,086.82	64.76
Net Totals	-14,045.87	103,057.35	45,434.17	-57,623.18	226.83

Fund: 620 - SEWER FUND

Account Number		2015		2015 Budget	Budget Status	% of Budget
		2015 October	Actual 10/20/2015			
620-00-44190-000-000	INTEREST AND DIVIDEND INTEREST	0.00	268.88	500.00	-231.12	53.78
620-00-44191-000-000	INTEREST SPECIAL ASSESSMENTS	0.00	118.79	1,515.00	-1,396.21	7.84
620-00-44192-000-000	CAPITAL CONTRIBUTIONS	0.00	0.00	0.00	0.00	0.00
620-00-44210-000-000	MISC. NON-OPERATING INCOME	0.00	349,640.47	1,500.00	348,140.47	23309.36
620-00-44210-001-000	MISC. NON-OPERATING INCOME	40.00	2,579.00	3,000.00	-421.00	85.97
620-00-44290-000-000	AMORTIZATION OF DEBT PREMIUM	0.00	0.00	0.00	0.00	0.00
620-00-44320-000-000	INTEREST CHARGED TO CONST	0.00	0.00	0.00	0.00	0.00
LICENSES AND PERMITS		40.00	352,607.14	6,515.00	346,092.14	5,412.24
620-00-46211-000-000	FLAT RESIDENTIAL SEWER	0.00	967.84	1,000.00	-32.16	96.78
620-00-46221-000-000	METERED RESIDENTIAL SEWER	1,102.21	394,061.71	450,000.00	-55,938.29	87.57
620-00-46221-001-000	METERED MULTI FAM RES SEWER	0.00	15,870.02	10,500.00	5,370.02	151.14
620-00-46222-000-000	METERED COMMERCIAL SEWER	183.44	195,901.51	250,000.00	-54,098.49	78.36
620-00-46223-000-000	METERED INDUSTRIAL SEWER	0.00	86,919.10	105,000.00	-18,080.90	82.78
620-00-46224-000-000	METERED PUBLIC AUTHORITY	540.58	31,360.39	30,000.00	1,360.39	104.53
620-00-46226-000-000	Leachate Treatment	0.00	0.00	0.00	0.00	0.00
620-00-46230-000-000	BOD CHARGES - HARLEY DAVIDSON	0.00	0.00	0.00	0.00	0.00
620-00-46310-000-000	PENALTIES	0.00	0.00	0.00	0.00	0.00
620-00-46320-000-000	SERVICING CUSTOMER LATERALS	0.00	0.00	0.00	0.00	0.00
620-00-46350-000-000	MISC. OPERATING REVENUE	0.00	0.00	350.00	-350.00	0.00
PUBLIC CHARGES FOR SERVICES		1,826.23	725,080.57	846,850.00	-121,769.43	85.62
620-10-49200-000-000	TRANSFER	0.00	888,191.22	0.00	888,191.22	0.00
620-10-49200-001-000	TRANSFER TO OTHER FUNDS	0.00	0.00	0.00	0.00	0.00
DONATIONS		0.00	888,191.22	0.00	888,191.22	0.00
Total Revenues		1,866.23	1,965,878.93	853,365.00	1,112,513.93	230.37

Fund: 620 - SEWER FUND

Account Number		2015		2015 Budget	Budget Status	% of Budget
		2015 October	Actual 10/20/2015			
620-00-59080-000-000	TAXES	0.00	0.00	0.00	0.00	0.00
620-00-59081-000-000	TAXES -FICA	826.65	9,102.56	12,029.17	2,926.61	75.67
620-00-59200-000-000	INTERFUND TRANSFER	0.00	0.00	0.00	0.00	0.00
620-00-59313-000-000	COLLECTING MAINS & ACCESSORIES	0.00	0.00	0.00	0.00	0.00
620-00-59379-000-000	ASSET: GEN EQUIP. LAB, COMMUNI	0.00	0.00	0.00	0.00	0.00
620-00-59403-000-000	DEPRECIATION	0.00	96,712.44	0.00	-96,712.44	0.00
620-00-59427-000-000	PRINCIPAL ON DEBT	0.00	0.00	210,708.57	210,708.57	0.00
620-00-59431-000-000	INTEREST ON DEBT	0.00	100,913.01	90,951.37	-9,961.64	110.95
620-00-59432-000-000	AMORTIZATION OF DEBT DISCOUNT	0.00	0.00	0.00	0.00	0.00
620-00-59820-000-000	OPERATION SUPERVISION & LABOR	10,625.20	116,079.81	133,707.21	17,627.40	86.82
620-00-59821-000-000	POWER & FUEL FOR PUMPING	5,664.34	56,176.54	67,000.00	10,823.46	83.85
620-00-59823-000-000	CHLORINE	0.00	0.00	0.00	0.00	0.00
620-00-59825-000-000	SLUDGE CONDITIONING CHEMICALS	0.00	4,830.08	7,000.00	2,169.92	69.00
620-00-59826-000-000	OTHER CHEMICALS-SEWAGE	0.00	0.00	0.00	0.00	0.00
620-00-59827-000-000	OTHER OPERATING SUPPLIES	420.39	5,059.04	14,500.00	9,440.96	34.89
620-00-59828-000-000	OPERATION-TRANSPORTATION	64.77	1,865.37	1,500.00	-365.37	124.36
620-00-59831-000-000	MAINT SEWAGE COLLECTIONS	0.00	372.96	26,000.00	25,627.04	1.43
620-00-59832-000-000	MAINT COLLECTION SYSTEM PUMP	80.25	10,226.27	13,000.00	2,773.73	78.66
620-00-59833-000-000	MAINT TREATMENT/DISPOSAL PLANT	122.33	9,083.89	15,000.00	5,916.11	60.56
620-00-59833-001-000	MAINT TREATMENT/DISPOSAL PLANT	0.00	0.00	0.00	0.00	0.00
620-00-59834-000-000	MAINT GENERAL PLANT STRUCTURE	199,930.38	1,990,396.65	0.00	-1,990,396.65	0.00
620-00-59834-001-000	MAINT GENERAL PLANT STRUCTURE	0.00	0.00	0.00	0.00	0.00
620-00-59835-000-000	MAINT OF METERS	178.88	3,046.40	36,850.00	33,803.60	8.27
620-00-59840-000-000	BILLING, COLLECTING & ACCTG	2,819.56	28,049.81	35,000.00	6,950.19	80.14
620-00-59842-000-000	METER READING	313.04	3,527.38	10,509.38	6,982.00	33.56
620-00-59850-000-000	ADMIN & GENERAL SALARIES	306.00	1,232.00	1,080.00	-152.00	114.07
620-00-59851-000-000	OFFICE SUPPLIES & EXPENSES	335.41	8,169.21	21,300.00	13,130.79	38.35
620-00-59852-000-000	OUTSIDE SERVICES EMPLOYED	23,193.53	184,390.09	11,000.00	-173,390.09	1,676.27
620-00-59852-001-000	OUTSD SERV.-TEST/SLUDGE HAUL	95.00	48,478.26	23,000.00	-25,478.26	210.78
620-00-59852-002-000	OUTSD SERV.-PHOSPHOROUS	0.00	0.00	5,000.00	5,000.00	0.00
620-00-59853-000-000	INSURANCE EXPENSE	0.00	3,841.50	9,500.00	5,658.50	40.44
620-00-59854-000-000	EMPLOYEE PENSIONS & BENEFITS	5,022.54	45,806.60	71,045.23	25,238.63	64.48
620-00-59855-000-000	REGULATORY COMMISSION	0.00	0.00	2,000.00	2,000.00	0.00
620-00-59856-000-000	MISC. GENERAL EXPENSE	141.30	2,294.11	10,000.00	7,705.89	22.94
OTHER FINANCING USES		250,139.57	2,729,653.98	827,680.93	-1,901,973.05	329.80
Total Expenses		250,139.57	2,729,653.98	827,680.93	-1,901,973.05	329.80
Net Totals		-248,273.34	-763,775.05	25,684.07	789,459.12	-2,973.73

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
15588	9/22/2015	CITY OF TOMAHAWK SOLID WASTE FUND REFUSE COLLECTION	
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	27.75
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	55.50
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	2,031.93
Total			2,115.18
15609	9/29/2015	CITY OF TOMAHAWK SOLID WASTE FUND REFUSE COLLECTION	
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	27.75
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	36.81
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	65.50
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	32.35
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	-31.89
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	41.81
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	1,648.64
Total			1,820.97
15610	9/29/2015	ENVIROTECH EQUIPMENT 091315-38A Sewer Jet	
620-00-59834-000-000		MAINT GENERAL PLANT STRUCTURE 091315-38A Sewer Jet	125,000.00
Total			125,000.00
15611	9/29/2015	EXXON MOBIL 4509 0001213 49.93g Unlead	
610-00-57933-000-000		TRANSPORTATION EXPENSE 4509 0001213 49.93g Unlead	132.55
Total			132.55

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
15612	9/29/2015	UNITED STATES POSTAL SERVICE Wtr Billing 8/15	
610-00-57903-000-000		SUPPLIES, MERER READ, BILLING Wtr Billing 8/15	118.18
620-00-59840-000-000		BILLING, COLLECTING & ACCTG Wwtr Billing 8/15	118.18
Total			236.36
15613	10/02/2015	AUCA CHICAGO MC LOCKBOX 616-7094010 Uniforms 3/12	
620-00-59827-000-000		OTHER OPERATING SUPPLIES 616-7094010 Uniforms 3/12	78.89
Total			78.89
15614	10/02/2015	CITY OF TOMAHAWK 10/15 Taxes Due City	
610-00-57080-000-000		TAXES 10/15 Taxes Due City	5,507.92
610-00-57902-000-000		ACCOUNTING AND COLLECTION LABO 10/15 Wtr Administration Due City	2,077.82
620-00-59840-000-000		BILLING, COLLECTING & ACCTG 10/15 Wwtr Administration Due City	2,701.38
610-00-15010-000-000		DUE TO/FROM GENERAL FUND 10/2 Wtr Payroll	5,556.45
620-00-15010-000-000		Due from/to General Fund 10/2 Wwtr Payroll	5,749.71
Total			21,593.28
15615	10/02/2015	FRONTIER 715-453-8601-083181-5	
610-00-57625-000-000		MAINTENANCE OF PUMPING PLANT 715-453-8601-083181-5	60.63
610-00-57602-000-000		S.O.S.-Misc supplies 262-002-4771-082781-5	30.00
620-00-59832-000-000		MAINT COLLECTION SYSTEM PUMP 262-001-8149-082896-5	80.25
Total			170.88
15616	10/02/2015	PUBLIC SERVICE COMMISSION OF WISCONSIN RA16-I 05930 Assessment Notice	

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
610-00-57928-000-000		REGULATORY COMMISSION RA16-I 05930 Assessment Notice	570.11
Total			570.11
15617	10/02/2015	STAAB CONSTRUCTION CORP WWTF 2015 UPGRADE - PAY REQUEST #6	
620-00-59834-000-000		MAINT GENERAL PLANT STRUCTURE WWTF 2015 UPGRADE - PAY REQUEST #6	197,013.95
Total			197,013.95
15618	10/02/2015	WISCONSIN PUBLIC SERVICE 135-81 Deer Park Rd	
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-81 Deer Park Rd	314.97
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-76 WWTP-Gen	21.30
Total			336.27
15619	10/06/2015	CITY OF TOMAHAWK SOLID WASTE FUND REFUSE COLLECTION	
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	2,232.86
Total			2,232.86
15620	10/09/2015	EAGLE WASTE & RECYCLING INC. 194920 Trash Service	
620-00-59856-000-000		MISC. GENERAL EXPENSE 194920 Trash Service	96.30
Total			96.30
15621	10/09/2015	FRONTIER 715-453-3143-010165-5	
620-00-59851-000-000		OFFICE SUPPLIES & EXPENSES 715-453-3143-010165-5	159.29
Total			159.29
15622	10/09/2015	MINNESOTA LIFE 2832L-G Nov Life Ins	
610-00-57926-000-000		EMPLOYEE PENSIONS & BENEFITS 2832L-G Nov Life Ins	2.21

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
620-00-59854-000-000		EMPLOYEE PENSIONS & BENEFITS	7.21
		2832L-G Nov Life Ins	
Total			9.42

15623	10/09/2015	MULCAHY/SHAW WATER, INC	
		319568 Sensor Probe	
620-00-59834-000-000		MAINT GENERAL PLANT STRUCTURE	2,400.18
		319568 Sensor Probe	
Total			2,400.18

15624	10/09/2015	SECURITY HEALTH PLAN	
		Nov Health Ins Prem	
610-00-57926-000-000		EMPLOYEE PENSIONS & BENEFITS	3,454.59
		Nov Health Ins Prem	
620-00-59854-000-000		EMPLOYEE PENSIONS & BENEFITS	4,222.26
		Nov Health Ins Prem	
Total			7,676.85

15625	10/09/2015	SHELL FLEET PLUS	
		0509 982686 82.61g Unlead	
610-00-57933-000-000		TRANSPORTATION EXPENSE	193.69
		0509 982686 82.61g Unlead	
610-00-57933-000-000		TRANSPORTATION EXPENSE	-2.48
		Discount - Wtr Dept	
Total			191.21

15626	10/09/2015	VERIZON WIRELESS	
		715-966-0464	
610-00-57625-000-000		MAINTENANCE OF PUMPING PLANT	125.85
		715-966-0464	
620-00-59851-000-000		OFFICE SUPPLIES & EXPENSES	106.51
		715-966-0471	
610-00-57625-000-000		MAINTENANCE OF PUMPING PLANT	63.02
		715-966-0614	
620-00-59851-000-000		OFFICE SUPPLIES & EXPENSES	69.61
		715-966-6816	
Total			364.99

15627	10/09/2015	WISCONSIN PUBLIC SERVICE	
		1858384 Charles Av	

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-57 Wwtr Plant	2,694.14
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-07 Lift Station #4	108.96
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-13 Lift Station #3	52.29
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-14 Lift Station #5	122.14
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-19 Lift Station #12	172.76
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-28 Lift Station #15	44.77
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-34 Lift Station #16	80.37
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-39 Lift Station #6	38.36
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-41 Lift Station #13	110.43
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-45 Lift Station #8	122.14
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-47 Lift Station #2	837.95
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-48 Lift Station #11	80.80
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-50 Lift Station #1	664.01
620-00-59821-000-000		POWER & FUEL FOR PUMPING 135-55 Lift Station #7	62.10
610-00-57622-000-000		FUEL/POWER FOR PUMPING 135-21 Waterworks Rd	1,792.86
610-00-57622-000-000		FUEL/POWER FOR PUMPING 135-33 Birchwood Av	52.08
Total			7,036.16
<hr/>			
15628	10/09/2015	WISCONSIN PUBLIC SERVICE 1 1858383 Deer Park Rd	
620-00-59821-000-000		POWER & FUEL FOR PUMPING 1858383 Deer Park Rd	95.79

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
620-00-59821-000-000		POWER & FUEL FOR PUMPING 1858384 Charles Av	41.06
Total			136.85
15629	10/13/2015	CITY OF TOMAHAWK SOLID WASTE FUND REFUSE COLLECTION	
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	2,578.37
Total			2,578.37
15630	10/13/2015	WISCONSIN DEPARTMENT OF NATURAL RESOURCES Renewal Fee - B Jelinek	
620-00-59856-000-000		MISC. GENERAL EXPENSE Renewal Fee - B Jelinek	45.00
Total			45.00
15631	10/20/2015	CITY OF TOMAHAWK SOLID WASTE FUND REFUSE COLLECTION	
610-00-15063-000-000		DUE TO/FROM SOLID WASTE FUND REFUSE COLLECTION	4,954.10
Total			4,954.10
15632	10/20/2015	A-1 EXCAVATING, INC 946 Watermain Repair	
610-00-57651-000-000		MAINTENANCE OF MAINS 946 Watermain Repair	9,675.00
Total			9,675.00
15633	10/20/2015	AUCA CHICAGO MC LOCKBOX 1677231638 Uniforms 9/29	
610-00-57923-000-000		OUTSIDE SERV-ENGINEER, WTR TEST 1677231638 Uniforms 9/29	59.52
610-00-57923-000-000		OUTSIDE SERV-ENGINEER, WTR TEST 1677241003 Uniforms 10/13	40.73
610-00-57923-000-000		OUTSIDE SERV-ENGINEER, WTR TEST 1677226951 Uniforms 9/22	40.25
610-00-57923-000-000		OUTSIDE SERV-ENGINEER, WTR TEST 1677236315 Uniforms 10/6	40.25
620-00-59827-000-000		OTHER OPERATING SUPPLIES 1677238249 Uniforms 10/8	85.79

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
620-00-59827-000-000		OTHER OPERATING SUPPLIES	88.50
		1677233555 Uniforms 10/1	
620-00-59827-000-000		OTHER OPERATING SUPPLIES	85.79
		1677228901 Uniforms 9/24	
Total			440.83
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15634	10/20/2015	BBVA COMPASS BANK	
		342981 Tank Inspection	
610-00-57650-000-000		MAINT DIST RESERVOIR/STANDPIPE	820.00
		342981 Tank Inspection	
Total			820.00
<hr/>			
15635	10/20/2015	BUMPER TO BUMPER TOMAHAWK	
		640-124165	
610-00-57933-000-000		TRANSPORTATION EXPENSE	12.59
		640-124165	
610-00-57933-000-000		TRANSPORTATION EXPENSE	1.49
		640-124391 Lamp	
610-00-57933-000-000		TRANSPORTATION EXPENSE	30.48
		640-124227 Grease Gun, Hose	
620-00-59833-000-000		MAINT TREATMENT/DISPOSAL PLANT	122.33
		640-124145 Ball Bearing, Oil Stabilizer	
Total			166.89
<hr/>			
15636	10/20/2015	CHARTER COMMUNICATIONS	
		8245 11 233 0060733	
610-00-57602-000-000		S.O.S.-Misc supplies	122.23
		8245 11 233 0060733	
Total			122.23
<hr/>			
15637	10/20/2015	CITY OF TOMAHAWK	
		10/16 Wtr Payroll	
610-00-15010-000-000		DUE TO/FROM GENERAL FUND	3,363.94
		10/16 Wtr Payroll	
620-00-15010-000-000		Due from/to General Fund	7,293.13
		10/16 Wwtr Payroll	
Total			10,657.07
<hr/>			
15638	10/20/2015	COUNTY MATERIALS CORPORATION	
		2626228-00 Rock	

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
610-00-57641-000-000 2626228-00 Rock		TRANS& DISTR. SUPPLIES/EXPNSSES	169.48
610-00-57650-000-000 2603177-00 Expansion Joint		MAINT DIST RESERVOIR/STANDPIPE	63.00
610-00-57650-000-000 54005357-00 Curb & Gutter Concrete		MAINT DIST RESERVOIR/STANDPIPE	225.00
Total			457.48
<hr/>			
15639 10/20/2015 150 9 57101 Tickets for 9/2015		DIGGERS HOTLINE	
610-00-57923-000-000 150 9 57101 Tickets for 9/2015		OUTSIDE SERV-ENGINEER, WTR TEST	85.57
Total			85.57
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15640 10/20/2015 4510 0002171 52.43g Unlead		EXXON MOBIL	
610-00-57933-000-000 4510 0002171 52.43g Unlead		TRANSPORTATION EXPENSE	120.53
620-00-59828-000-000 4510 0002144 28.60g Unlead		OPERATION-TRANSPORTATION	64.77
Total			185.30
<hr/>			
15641 10/20/2015 0182738-1 PVC Coup		FERGUSON WATERWORKS #1476	
610-00-57641-000-000 0182738-1 PVC Coup		TRANS& DISTR. SUPPLIES/EXPNSSES	105.51
610-00-57923-000-000 0182954 Leak Det		OUTSIDE SERV-ENGINEER, WTR TEST	250.00
Total			355.51
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15642 10/20/2015 715-453-8601-083181-5		FRONTIER	
610-00-57625-000-000 715-453-8601-083181-5		MAINTENANCE OF PUMPING PLANT	60.59
Total			60.59
<hr/>			
15643 10/20/2015		LOCAL GOVERNMENT INVESTMENT POOL	
610-00-25010-000-000 Deposit to 835286 Sub Acct 11		Due to General Fund	4,500.00

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
620-00-15010-000-000		Due from/to General Fund Deposit to 835286 Sub Acct 11	500.00
Total			5,000.00
15644	10/20/2015	MSA PROFESSIONAL SERVICES, INC. 2 GIS Web Hosting	
620-00-59852-000-000		OUTSIDE SERVICES EMPLOYED 2 GIS Web Hosting	450.00
610-00-57923-000-000		OUTSIDE SERV-ENGINEER, WTR TEST 2 GIS Web Hosting	450.00
620-00-59852-000-000		OUTSIDE SERVICES EMPLOYED 17 WWTF Improvements Design	22,181.03
Total			23,081.03
15645	10/20/2015	NORTHERN LAKE SERVICE INC 282785 Phosphorus	
620-00-59852-001-000		OUTSD SERV.-TEST/SLUDGE HAUL 282785 Phosphorus	95.00
Total			95.00
15646	10/20/2015	QUALITY EQUIPMENT 01-5643 Bobcat Rental	
610-00-57650-000-000		MAINT DIST RESERVOIR/STANDPIPE 01-5643 Bobcat Rental	250.00
Total			250.00
15647	10/20/2015	SCHENCK BUSINESS SOLUTIONS SC10079669 Onsite Assistance	
610-00-57923-000-000		OUTSIDE SERV-ENGINEER, WTR TEST SC10079669 Onsite Assistance	562.50
620-00-59852-000-000		OUTSIDE SERVICES EMPLOYED SC10079669 Onsite Assistance	562.50
Total			1,125.00
15648	10/20/2015	TOMAHAWK ACE HARDWARE 299036 UPS, Battery	
620-00-59827-000-000		OTHER OPERATING SUPPLIES 299036 UPS, Battery	25.11
620-00-59827-000-000		OTHER OPERATING SUPPLIES 299780 Fly Trap, Foil, Freezer Bags	18.29

1ST MERIT - WATER AND SEWER CHECKING

ALL Checks

Posted From: 9/21/2015 From Account:
Thru: 10/20/2015 Thru Account:

Check Nbr	Check Date	Payee	Amount
610-00-57654-000-000		MAINTENANCE OF HYDRANTS 299423 Windshield Wash, Paint Thinner	11.98
610-00-57605-000-000		MAIN OF WATER SOURCE PLANT 300533 Battery	10.79
620-00-59827-000-000		OTHER OPERATING SUPPLIES 300441 Wire Brush, Bleach, Lysol	13.46
620-00-59827-000-000		OTHER OPERATING SUPPLIES 300414 Pipe	24.56
Total			104.19
15649	10/20/2015	USA BLUE BOOK I12247 Manhole Cover, Hydrant Wrench	
610-00-57933-000-000		TRANSPORTATION EXPENSE I12247 Manhole Cover, Hydrant Wrench	135.35
Total			135.35
15650	10/20/2015	VISU-SEWER 27037 Cleaned Lines	
620-00-59834-000-000		MAINT GENERAL PLANT STRUCTURE 27037 Cleaned Lines	516.25
Total			516.25
15651	10/20/2015	WISCONSIN DEPARTMENT OF NATURAL RESOURCES Renewal Fee - B Strelow	
610-00-57602-000-000		S.O.S.-Misc supplies Renewal Fee - B Strelow	45.00
Total			45.00
15652	10/20/2015	WISCONSIN STATE LAB OF HYGIENE 432257 Fluoride	
610-00-57923-000-000		OUTSIDE SERV-ENGINEER, WTR TEST 432257 Fluoride	20.00
Total			20.00
Grand Total			430,348.31

CHAPTER IV – OPERATION AND MAINTENANCE ACTIVITIES

A comprehensive Collection System Operation and Maintenance (O&M) Program includes: Mainlines, manholes, lift stations, and private laterals. Collection system O&M an essential element of a CMOM Program. A summary of yearly O&M activities is detailed below.

4.1 OPERATION AND MAINTENANCE ACTIVITIES

- Inventory 135,887 lineal feet of 6" to 15" sewer, 531 manholes
- Cleaning 95% of sewer system was cleaned in 2015
- Root Removal The City sprayed "root chemical" in approximately 3,600 ft of City sewers in 2014
- Flow Monitoring The WWTF has a flowmeter but none of the lift stations are equipped with flow monitoring equipment.
- Sewer Line Televising 24,514 LF televised = $24,514/135,887=18\%$ of system
- Manhole Inspections In 2013, 80% of manholes were inspected; in 2014, 20% of manholes were inspected
- Manhole Rehabilitation In 2014 78 or 15% of manholes were rehabbed (manhole sealing and cementitious lining).
- Mainline Rehabilitation In 2014 the 16,195 LF (7,600 LF CIPP and 8,595 joint sealing) or 12% of the collection system was rehabbed
- Private Sewer Inspections 10-12 inspections/year, 5% in 2013 from 2014 CMAR
- Private Sewer I/I Removal 0 in 2013 from 2014 CMAR
- Lift Station O&M In 2015 a lift station at Mohawkskin Shore subdivision was added. The system total is now 16 lift stations.
- Other I/I reduction efforts In 2015 there were 76 laterals cleaned and sealed for the first 60" from the mainline as part of the sewer rehab project.

4.2 OPERATION AND MAINTENANCE PROCEDURES

4.2.1 CONTROL/REGULATE PRIVATE PROPERTY CLEAR WATER FROM SUMPS, CROSS CONNECTIONS, ROOF DRAINS, FOUNDATION DRAINS, ETC.

- City staff looks for cross connections at the same time they change water meters.
- City staff reviews new construction for compliance
- Sewer ordinance provides requirements and enforcement authority to regulate clear water connections.

4.2.2 DEFINE OWNERSHIP POINT ON PRIVATE LATERALS

- Homeowner is responsible for sewer lateral from house to the sewer main. Per sewer ordinance.

4.2.3 SEWAGE FROM PRIVATE SYSTEMS

- Trailer park on Leather Avenue and Bliss Street. Fee based on one meter for complex.
- Trailer Park on CTH CC and Trimberger Avenue. Fee based on one meter for complex.
- Tomahawk School Complex - City charges school district to clean out last section of sewer (private)

4.2.4 REGULAR MAINTENANCE TASKS

- Clean and inspect entire collection system every 2 years. City has met this goal for 2013/14.
- Treat for problem roots identified in cleaning.
- Inspect manholes for entire system every 2 years. City completed entire system for 2013/14.
- Populate base information and maintain GIS based Asset Management System.
- Televisive problem areas as identified with in house camera
 - Evaluate roots, grease and I/I problems
- Maintain problem areas yearly and before special events
 - Provide list here

4.2.5 LIFT STATION MAINTENANCE PROCEDURES

- 16 lift stations, one 25 kW portable generator on a trailer to serve 13 of the lift stations, three of the lift stations have permanently mounted standby power. They are:
 - Water Park Lift Station #2
 - Memorial Park Lift Station #1
 - Deer Park Lift Station #9
- The generators are exercised once per week for an hour of runtime.
- Lift stations are monitored by SCADA software located at the WWTF. The operator and wastewater staff all have the capability to view the system and receive alarms over their cell phones.
- City personnel visit each lift station once per week.
 - The lift stations don't have flow monitors. The SCADA software estimates flows based on pump runtimes and lift station wet well size. The WWTF flow meter is the only flow meter in the system.
- Remove solids from lift station wet wells yearly.

Mike Tolvstad

From: Greg Gunderson <ggunderson@msa-ps.com>
Sent: Monday, October 26, 2015 11:00 AM
To: Mike Tolvstad (dpwdirector@cityoftomahawk.com); Jeff Seamandel; Dave Van De Weerd
Subject: City of Tomahawk WWTF - Control Options Summary 10-26-15
Attachments: City of Tomahawk WWTF - Control Options Summary 10-26-15.docx

Here's a summary for tomorrow's commission meeting. Jeff will be attending to help describe the options and take questions.

Here is one clarification – Option #2 doesn't take the place of Option #1. Option #1 brings in 2 additional alarms to the Omni Site. Option #2 just allows for viewing the touchscreen of the Blower Building on the existing Office computer. It does not include any additional alarms. So, to compare apples-to-apples, you need to compare Options #1 and #2 together vs. Option #3.

Thanks, Greg

City of Tomahawk WWTF

Alarm Monitoring and SCADA System Options

Option #1 – Add Common Alarms from Blower Building **\$2,910**

This option adds two alarms that will be generated by the new control panel in the Blower Building. The operator will be able to select any alarm signal that is presently in this control panel to activate common alarm 1 or common alarm 2. Generally these alarms include all new equipment being installed under the current project. These alarms will be tied into the existing OmniSite alarm system. Essentially alarming will continue to function as it presently does and two new alarm signals will be added.

Option #2 – Remote Monitoring **\$8,721**

This option adds the ability to view and interact with the touch screen on the new Blower Building control panel from the existing PC located in the office. Only the functions that presently exist on the Blower Building control panel touchscreen will be available on the PC in the Lab. The network infrastructure required to implement this option is identical to that required for option #3; option #2 could be implemented now and option #3 could be added in the future without any changes to the network.

Option #2 does not provide for Option #1. If Option #2 is selected, it is recommended that Option #1 is also selected.

Option #3 – Full SCADA System **\$38,013**

This option adds a SCADA System and new computer in the Lab. If this option is selected, you would not need Options #1 and #2. The new system will allow monitoring and control of all new functions in the Blower Building Control Panel and will also allow the collection and reporting of historical data. Without the SCADA system, the operator will need to manually collect the data necessary for generating regulatory and operational reports whereas SCADA will collect this information automatically.

SCADA would also include a software alarm dialer that would allow the operator to receive alarm calls that would clearly identify each individual alarm condition (e.g. RAS Pump No.1 Fail versus WWTF Common Alarm). Option No.1 and the Omni-site system could remain and serve as a back-up alarm system.

The SCADA system offers several advantages over the other options including:

- The ability to add monitoring and control of other existing equipment that is not presently incorporated into the Blower Building Control Panel easily in the future.
- The ability to connect to the control system remotely from another computer or smart phone so that alarms can be handled efficiently by the operator.

- The ability to add monitoring of remote lift stations (not monitored by the Omni-site System) through the existing radio telemetry system that serves the water utility (this could also include monitoring, control, and reporting for the water system)
- Monitoring of the lift stations that are presently connected to the Omni-Site system could also be migrated to the new SCADA system.

Change Order

No. 5

Date of Issuance: 10/9/15 Effective Date: 10/9/15

Project: WWTF Upgrade	Owner: City of Tomahawk	Owner's Contract No.:
Contract: Tomahawk Wastewater Treatment Facility Upgrade	Date of Contract: 12/30/14	
Contractor: Staab Construction	Engineer's Project No.:	00046044

The Contract Documents are modified as follows upon execution of this Change Order:
Description:

Clarifier Actuator Control (\$19,589), Primary Pump Piping Coatings (\$3,514), Replace WAS control valve (\$1,888)

Attachments (list documents supporting change):
Staab C.O. proposals

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
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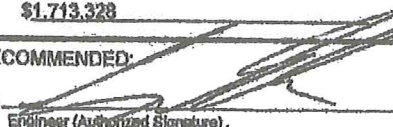
Original Contract Price: <u>\$1,634,171</u>	Original Contract Times: <input type="checkbox"/> Working days <input checked="" type="checkbox"/> Calendar days Substantial completion (days or date): <u>November 1, 2015</u> Ready for final payment (days or date): <u>December 31, 2015</u>
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Increase from previously approved Change Orders No. 1 to No. 4 <u>\$154,166</u>	Increase from previously approved Change Orders No. 1 to No. 4 Substantial completion (days): <u>November 25, 2015</u> Ready for final payment (days): <u>December 31, 2015</u>
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Contract Price prior to this Change Order: <u>\$1,688,337</u>	Contract Times prior to this Change Order: Substantial completion (days or date): <u>November 25, 2015</u> Ready for final payment (days or date): <u>December 31, 2015</u>
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Increase of this Change Order: <u>\$24,991</u>	Increase of this Change Order: Substantial completion (days or date): <u>0</u> Ready for final payment (days or date): <u>0</u>
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Contract Price incorporating this Change Order: <u>\$1,713,328</u>	Contract Times with all approved Change Orders: Substantial completion (days or date): <u>November 25, 2015</u> Ready for final payment (days or date): <u>December 31, 2015</u>
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RECOMMENDED:
By: 
Engineer (Authorized Signature)
Date: 10/9/15
Approved by Funding Agency (if applicable):

ACCEPTED:
By: 
Owner (Authorized Signature)
Date: 10/9/15

ACCEPTED:
By: 
Contractor (Authorized Signature) Benjamin J. Lee,
Date: 10/13/15 Vice President



Staab PM Change Order Estimate

GREG GUNDERSON
 M S A PROFESSIONAL SERVICES
 1230 SOUTH BLVD
 BARABOO, WI 53913-2791

File: 4481- CO
 Date: 08/31/2015
 Project: 4481- TOMAHAWK WWTF
 Re: AUTOMATION OF RASIWAS VALVE ACTUATORS AT FINAL
 CLARIFIER 1&2

PCO: 29 PCO Item #: 1

Phase	Description	Comments	Qty	UM	Material	Indirect	Rent	Hours	Rate	Labor	Sub	Equip	Totals
1001- -	Supervision		0	CLH				8	107.40	859			859
2050- -	Demolition		1	LS			127	9	99.35	894	886		1,907
2505- -	Gravel - All locations		3	CCY	64		13	6	96.93	533			610
2933- -	Seed, Fertilizer & Mulch		79	SY	146		35	6	96.48	579			760
13690- -	P & I Control Systems		0								4,450		4,450
16050- -	Electrical Construction		0	C\$							9,985		9,985
	Total Cost				210		175	29		2,865	15,321		18,571
	Percent Margin				15.00%		15.00%				5.00%		
	Margin				31		26				766		824
	Contract Price Sub-Total				241		201			2,865	16,087		19,395
1220- -	BONDS												194
	Contract Price Total												19,589



Staab PIM Change Order Estimate

GREG GUNDERSON
 M S A PROFESSIONAL SERVICES
 1230 SOUTH BLVD
 BARABOO, WI 53913-2791

File: 4481- CO
 Date: 10/05/2015
 Project: 4481- TOMAHAWK WWTF
 Re: PAINT PRIMARY SLUDGE PUMP PIPE & FLOOR(STR10)

PCO: 32 PCO Item #: 1

Phase	Description	Comments	Qty	UM	Material	Indirect	Rent	Hours	Rate	Labor	Sub	Equip	Totals
1001- -	Supervision		0	CLH				2	107.40	215	3,109		215
9900- -	Painting	Includes Pipe and Floor Coatings	1	LS									3,109
	Total Cost							2		215	3,109		3,324
	Percent Margin										5.00%		
	Margin										155		155
	Contract Price Sub-Total									215	3,264		3,479
1220- -	BONDS												35
	Contract Price Total												3,514



Staab PM Change Order Estimate

GREG GUNDERSON
 M S A PROFESSIONAL SERVICES
 1230 SOUTH BLVD
 BARABOO, WI 53913-2791

File: 4481- CO
 Date: 10/01/2015
 Project: 4481- TOMAHAWK WWTF
 Re: ADD 4" WAS PLUG VALVE

PCO: 31 PCO Item #: 1

Phase	Description	Comments	Qty	UM	Material	Indirect	Rent	Hours	Rate	Labor	Sub	Equip	Totals
1001- -	Supervision		0	CLH				1	107.40	107	216		107
2050- -	Demo/kill		1	LS				2	99.35	199	5.00%		199
15002- -	DI Piping Lbr		1	LS				4	92.70	371			371
15100- -	Valve Materials		1	LS	772								772
15120- -	Pipe Accessories		1	LS	67								67
16050- -	Electrical Construction		0	CS							218		218
	Total Cost				839			7		677	216		1,732
	Percent Margin				15.00%						5.00%		
	Margin				126						11		137
	Contract Price Sub-Total				965					677	227		1,869
1220- -	BONDS												19
	Contract Price Total												1,888

Decaying infrastructure threatens water

aging drinking
mains built decades
need replacement

By J. FOLEY
The Press
Des Moines, Iowa—Deep in a 70-year-old water-treatment plant, drinking water for the state's capital city is cleansed of harmful nitrates that come from the state's famously rich land. Throughout Des Moines Water Works, the central Iowa region serves 1,000 people that it serves don't have a thriving economy but after decades of ceaseless service, the utility is confronting an array of problems: water mains are cracking open

hundreds of times every year. Rivers that provide its source water are increasingly polluted. And the city doesn't know how it will afford a \$150 million treatment plant at a time when revenues are down and maintenance costs are up.

"We're reaching the end of the life cycle of some of the most critical assets we've got," said Bill Stowe, CEO and general manager of the utility, where the downtown plant was built long before nitrates that can harm infants became a pressing concern.

Around the country, scores of decaying drinking water systems built around the time of World War II and earlier are in need of replacement. The costs

Please see **WATER, 10A**

City avoids water system crisis

By DON BEHM
dbehm@journalssentinel.com

Thanks to an infamous public health scare in 1993, Milwaukee has largely avoided the nationwide crisis of how to pay for long-deferred upgrades of drinking water treatment systems.

The Milwaukee Water Works has invested more than \$459 million in its treatment plants, pipes and pumps since an epidemic of cryptosporidiosis swept through the city and became the largest documented waterborne disease outbreak in U.S. history.

Though cities like Des Moines are now facing coming up with \$150 million soon to build a new treatment plant, Milwaukee spent \$89 million from 1994 to 1998 to upgrade its two plants with state-of-the-art filters, particle monitors and even ozone disinfection to kill the toughest microbes out there.

"We put a lot of money into the treatment plants at that time and got a big leap forward," Water Works Superintendent Carrie Lewis said.

Please see **CITY WATER, 10A**

From page 1

CITY WATER

Main breaks continue

"Since then, we have been focusing on water mains, storage tanks, pumping stations — all downstream of the treatment plants."

Even so, Milwaukee does share a problem common to all major northern cities with winter weather: water main breaks.

Some of Milwaukee's water mains were installed as far back as 1873.

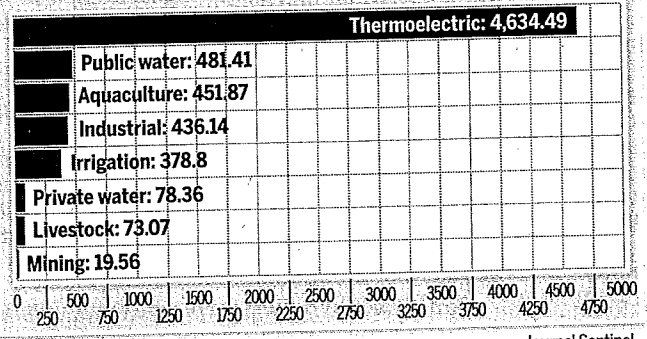
Though the city is picking up the pace of replacing aging water mains, not all pipes are being rebuilt after 100 years of use. That is the recommended water industry standard.

Residents do not need to be

Water usage by sector

Every five years the U.S. Geological Survey compiles nationwide data on water use at the county, state and national level. Here are some of Wisconsin's most notable sectors and their water usage in 2010.

Wisconsin's 2010 average daily water withdrawals by sector, in millions of gallons per day



Source: AP

Journal Sentinel

reminded that municipal water pipes are aging.

Lincoln Memorial Drive flooded during the morning rush hour on Sept. 17 after a county-owned main broke and water gushed out of the hillside opposite Bradford Beach.

The pipe was not considered old since it was installed in 1949. The county now knows what the city found out long ago: More than half of breaks occur in pipes installed between 1943 and 1963 due to poor quality metal and sloppy installation practices at the time.

Replacing those pipes takes up a lot of cash that could have been spent on rebuilding older mains.

There have been 379 breaks of city-owned water mains so far this year. But that tally is far short of the record numbers in 2014, when utility crews had repaired 724 main breaks by the end of May. Most of the problems occurred in extreme cold that winter.

It costs an average of \$2,400 to repair a break.

In 2015, the Milwaukee Water Works is on track to replace 15 miles of water mains, a hare's pace compared to the 1.3 miles in 2012, and more than double the 7.2 miles in 2013.

The state Public Service Commission last year required the water works to replace no less than 15 miles of

mains this year, under terms of a 10.8% revenue boost in a rate case. The boost is expected to generate \$9.25 million in additional annual revenue, up to a total of \$94.86 million a year.

Residential customers pay an average of \$210 a year for water.

It costs about \$1.2 million per mile to replace small water distribution pipes — between 4 inches and 16 inches in diameter — beneath city streets, officials said.

The city maintains 1,963 miles of small and large mains. Milwaukee will achieve a 1% a year replacement rate if it gets to 20 miles of main replacements in 2020, as required by the PSC in the 2014 rate case.

"We are on track to accomplish that," Lewis said.

The utility's Texas Ave. pumping station was shut down in May 2014 after leaks were discovered in a 72-inch steel pipe delivering water from Lake Michigan. Closing of the pumping station cut off all lake water to the south side Howard Ave. treatment plant, so it, in turn, was closed temporarily.

Milwaukee avoided a major water crisis at the time because it has two treatment plants. The Linnwood plant on the lakeshore north of Bradford Beach has the capacity to serve the entire city and its suburban customers. It was completed in 1939.

Howard Ave. was completed in 1962 to provide additional capacity.

From page 1

WATER**Rising rates predicted**

to rebuild will be staggering. The costs of inaction are already piling up. The challenge is deepened by drought conditions in some regions and government mandates to remove more contaminants.

At stake is the continued availability of clean, cheap drinking water — a public health achievement that has fueled the nation's growth for generations.

"The future is getting a little dark for something as basic and fundamental as water," said Adam Krantz of the Water Infrastructure Network, a lobbying group that is fighting cuts to key federal water programs.

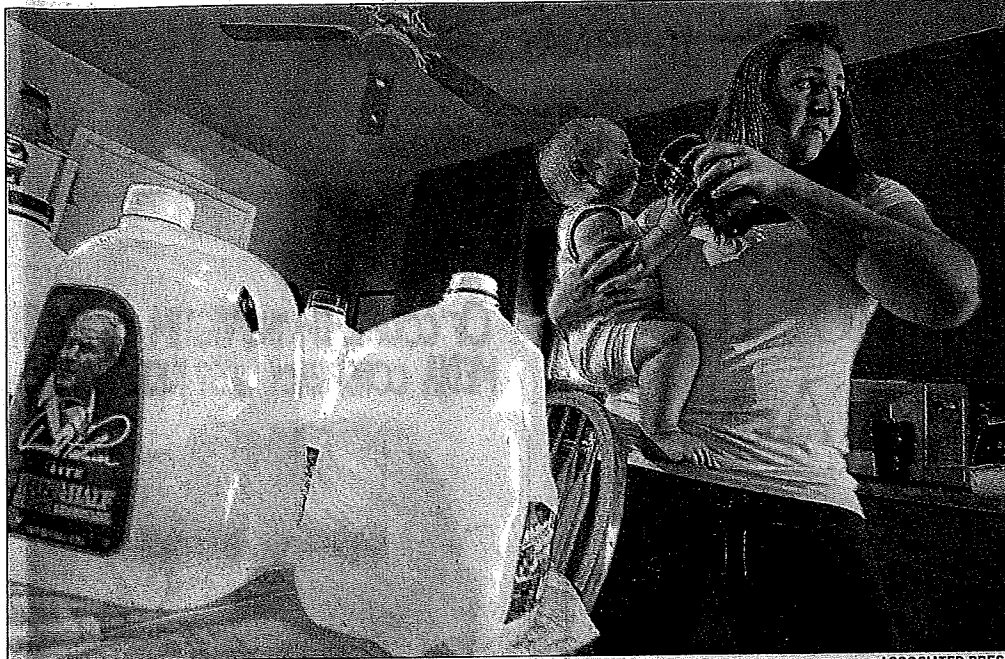
Unlike pothole-scarred roads or crumbling bridges, decaying water systems often go unnoticed until they fail. But without big changes in national policy, local governments and their ratepayers will be largely on their own in paying for the upgrades. The amount of federal money available is a drop in the bucket. That will mean rising water rates on customers, a trend expected to continue, for years.

"That's the key that Americans have to understand: If they want this system, they are going to have to be willing to finance it," said Greg DiLoreto, past president of the American Society of Civil Engineers, which has warned of a future with more equipment failures that will disrupt water service, transportation and commerce.

Nationwide impact

More than a million miles of underground pipes distribute water to American homes, and maintaining that network remains the largest and costliest long-term concern.

As they get older, they fail in different ways. Some split and rupture, with an estimated



ASSOCIATED PRESS

Emily Webb gives her son, Oliver, water from her supply of drinking water at their home in Pretty Prairie, Kan. Webb stopped drinking city water about two years ago because of high nitrate levels.

700 main breaks occurring around the U.S. every day. The most devastating failures damage roadways, close businesses and shut off service for hours or days.

Utilities have long struggled to predict when to replace pipes, which have vastly different life cycles depending on the materials they are made from and where they are buried. Experts say a peak of up to 20,000 miles of pipe will need to be replaced annually beginning around 2035, up from roughly 5,000 miles currently. Each mile can cost \$500,000 or more.

The impacts are playing out across the nation. The Philadelphia water department, the nation's oldest, is already spending tens of millions of dollars more per year to replace its worst pipes. Yet the city saw more than 900 water main breaks in the most recent budget year. In June, two massive breaks forced evacuations and damaged cars, homes and businesses.

New Orleans once boasted about not raising water rates for two decades. But in 2012, the city approved 10% increases on water bills for eight straight years as part of a plan to fix its crumbling system.

Paying more for less

Pipes aren't the only components in need of big invest-

ments. Many treatment plants are old and need to be replaced or rebuilt at a cost of tens of millions of dollars even in small cities.

New valves to control water flow, new pumping stations to keep up pressure and new tanks to store water are also needed.

The demand for investment comes as revenue is falling, in large part because Americans are using less water and installing more efficient toilets and shower heads. Many households affected by drought have also cut their usage, either voluntarily or because of mandatory orders. That is good for conservation but starves water systems, which charge customers based on the amount used.

Facing the loss of income, many have been forced to raise rates. Customers are essentially paying more for using less.

Costs are also rising to accommodate federal regulations that require removal of more potentially harmful contaminants.

Many of these pressures are colliding in Des Moines, where the utility is considering a rate hike for customers of about 10% for next year.

Des Moines Water Works is fighting nitrate levels that are often far above the federal standard for safety in the two

rivers that provide its source water.

Nitrates are often the result of farm runoff that is tainted with fertilizer and manure, and removing them is expensive because they aren't addressed in the normal treatment process.

The water agency has taken the unprecedented step of suing three major Iowa farming counties in federal court to try to limit the farm discharges. But the litigation has provoked intense criticism from Iowa's powerful agricultural industry, which argues that farmers are already taking voluntary measures to control them.

The treatment costs also leave less money to replace Des Moines' aging pipes. The effects are felt by residents such as Mario Tumea, whose family's Italian restaurant was closed in May for a day and a half after a 12-inch cast-iron main from 1938 split and sent water gushing into the street.

"It's frustrating," he said. "But when you have old pipes and stuff like that, it's going to happen."

The Associated Press, in partnership with the Associated Press Media Editors association, has undertaken a yearlong collaborative project examining the nation's infrastructure needs. This is the third installment.