CITY OF SHAVANO PARK
WATER ADVISORY COMMITTEE MEETING
900 SADDLETREE COURT, SHAVANO PARK, TX 78231
MONDAY, MAY 11, 2020
5:00 PM
AGENDA

THIS MEETING WILL BE CLOSED TO IN-PERSON ATTENDANCE BY THE PUBLIC.

In accordance with Order of the Office of the Governor issued March 16th, 2020, the governor has suspended various provisions of the Open Meetings Act pursuant to his state disaster authority, which now authorize the participation of a meeting by live-video stream or telephone. The City of Shavano Park Water Advisory Committee will conduct the Regular Meeting on Monday, May 11, 2020 at 5:00 p.m. at 900 Saddletree Court, Shavano Park Council Chambers in part by Livestream / telephone conference in order to advance the public health goal of limiting face-to-face meetings (also called "social distancing") and slow down the spread of the Coronavirus (COVID-19).

Livestream. The livestream of the meeting is available via the Youtube website from your computer, tablet or smartphone at: https://youtu.be/xa53o7H__Ro

Telephone Participation. The public toll-free dial-in number to participate in the telephonic meeting is 1-866-899-4679 and requires access code 133-413-629. If you have issues accessing Telephone Participation or Livestream, please call City Secretary Zina Tedford at 210-787-0366.

The telephone conference will be available to join at 4:30 pm (30 minutes prior to the meeting).

The public will be permitted to offer comments telephonically as provided by the agenda during Citizen's to be Heard. Citizens who want to speak during this period, should sign up to speak prior to the beginning of the meeting by stating their intent and providing Name, Address, and Topic to be addressed. Follow the guidelines under agenda item 3. If unable to participate in the meeting, you may submit public comments by email to ztedford@shavanopark.org.

The meeting agenda and agenda packet are posted online at www.shavanopark.org.

A recording of the telephonic meeting will be made, and will be available to the public in accordance with the Open Meetings Act upon written request.

1. **CALL TO ORDER**

2. **ROLL CALL**

3. **CITIZENS TO BE HEARD**

The Water Advisory Committee welcomes Citizens to be heard, we request that if you wish to speak that you follow these guidelines. Pursuant to Resolution No. R-2019-011 citizens are given three (3) minutes to speak during Citizens to be heard. Members of the public may only speak once and cannot pass the individual's allotted time to someone else. In compliance with the Texas Open Meetings Act, the Water Advisory Committee may no deliberate on comments (Attorney General Opinion – JC0169)

4. CONSENT AGENDA
   a. Approval – Water Advisory Committee Meeting Minutes, April 20, 2020

5. **REPORTS - Public Works Director Update**
   a. Water system
      i Water System Infrastructure Updates
      ii NW Military Water line replacement Updates
   b. Financial Report – March 2020

6. **REGULAR BUSINESS**
   a. Discussion / action – Replacement options for future water meters: "Drive-by" vs. "Cellular" data collection - PW Director
   b. Discussion / Update - Trinity Well Update - PW Director / Engineer
   c. Discussion – Water Goals and Objectives for FY 2020 Budget – PW Director

7. **FUTURE ITEMS**
   d. NW Military Water Line relocation

8. **ADJOURNMENT**

I, the undersigned authority, do hereby certify that the above Notice of Meeting of the governing body of the above named City of Shavano Park Water Advisory Committee is a true and correct copy of said Notice and that I posted a true and correct copy of said Notice on the bulletin boards, of the City Hall of said City Shavano Park, Texas, a place convenient and readily accessible to the general public at all times, and said Notice was posted on this the 8th day of May 2020 at 12:35 p.m. and remained so posted continuously for at least 72 hours preceding the scheduled time of said meeting.

Zina Tedford
City Secretary

CITY OF SHAVANO PARK
WATER ADVISORY COMMITTEE MEETING
900 SADDLETREE CT, SHAVANO PARK, TX 78231
MONDAY, APRIL 20th, 2020

5:00 P.M.
MINUTES

1. CALL TO ORDER
   The meeting was called to order at 5:06 p.m. by Chairman Walea
   This is a Live Stream/telephone meeting with those in attendance as follows:

2. ROLL CALL

PRESENT:	ABSENT:
Al Walea	Steve Fleming
Tommy Peyton - phone	
Sam Bakke	
Tomas Palmer	
Matt Trippy	

3. CITIZENS TO BE HEARD
   None

4. CONSENT AGENDA
   a. Approval - Water Advisory Committee Meeting Minutes, March 9th, 2020
      Member Palmer moved to approve above minutes, Member Peyton seconded. Motion passed.

5. REPORTS – Public Works Director Update
   a. Water System
      i. Water System Infrastructure Update
         Director Peterson related that there have been issues with Well # 5 and # 6 this month. Leading to unexpected additional costs for repairs.

   b. Financial Report February 2020
      Finance Director Morey reviewed the revenues and expenditures for February. The Revenues look better than last year and Expenditures were below expectations. Debt Service payment will be done in August – interest only.
      Member Palmer made a motion to accept the financials as is, Member Bakke seconded. Motion passed.

6. REGULAR BUSINESS
   a. Discussion/action – Replacement options for future water meters: "Drive-by" vs "Cellular" data collection – PW Director

      In 2007, the City replaced all meters to Badger CE models. Based on records, the City began having issues with malfunctioning meters in January of 2013. For several years, meters were under warranty and replaced at no cost to the City. The City was informed in December 2019, that Badger was no longer supporting the CE models. As the CE's batteries die, the City would have to upgrade to ME or cellular meters.

      In January of this year we had 47 meters that no longer would read with the drive-by system and crew would have to go take physical readings. February that number increased to 99 and March it was 115 meters with dead batteries. We have two options, go with the ME model or the Cellular. Residents if interested in the Cellular would be able to monitor their usage easily by satellite (phone, I-pad, etc.) There is a fee of $.89/ month that is added to their bill for the 6 current residents that have opted for cellular meters. Currently the City pays $.06/month. There is an app available for each resident with a rebate. The ME meter – drive-by system can be switched to Cellular by changing out the register. Member Peyton asked why the batteries couldn't just be switched out? Chip Woods of Badger Meter answered that the batteries are silicone sealed in the register transmitter and can't be changed out. More questions were asked of Mr. Woods and Director Peterson including costs. This fiscal year there is monies for 82 meter replacements. Members would like a better explanation and cost breakdown for next meeting. Members asked Mr. Woods for the cost difference battery costs of the ME and Cellular and a cost for 707 meters. City Manager said that for the rest of this year it's probable that the City could absorb the cost of the cellular $.89 per meter.

   b. Discussion/Update - Trinity Well Update - PW Peterson/Engineer
      Director Peterson reviewed the inspection of the well and indicated that it was videoed, but a gamma test wasn't completed since the well screens were clogged. However, the first through fourth bowl are cast iron and show that they are pitted. Bowls 5 – 14 and impellers are ductile iron and seem to be fine. Mark Roetzel, a consultant who did the analysis of the Trinity Well expressed several observations to the members. (Report is attached). Discussion continued about the 3 options – Restoration - $ 201,500, Abandon - $ 73,500 or Idling - $ 19,000. Chairman suggested an investigation with Mark and team the best way to posture the City for

future use. Director Peterson should look into bids for mothballing the well for future, to be able to bring it back into use when needed.

7. FUTURE ITEMS
   c. NW Military Water Line relocation
   Director Peterson updated members that 60% of plans are in and City would have to move about 2,700 feet and the City's cost is approximately $ 470,000 - $ 480,000. City Manager Hill mentioned that only 8% of residents that use NW Military are from Shavano Park the rest are through traffic riders.

8. ADJOURNMENT
   Member Palmer made a motion to adjourn, Member Peyton seconded. Motion to adjourn passed. Meeting adjourned at 6:37p.m.

_____
Peggy Stone
PW/Water Utility
Office Manager

_____
Al Walea, Chairman

Date: _____

WATER ADVISORY COMMITTEE STAFF SUMMARY

Meeting Date: May 11, 2020 Agenda item: 5.b.

Prepared by: Brenda Morey Reviewed by: Bill Hill

AGENDA ITEM DESCRIPTION: Presentation of March 2020 Monthly Report

[X] **Attachments for Reference**: 1) March 2020 Revenue and Expense Report

BACKGROUND / HISTORY:

The information provided in the attachment is for the FY 2019-20 budget period, month ending March 31, 2020. The "Current Budget" column contains the original adopted budget, as the budget amendment was approved by City Council in April. This summary highlights a number of points related to the current month's activity.

DISCUSSION:

As of March 31, 2020, the Water Fund total revenues are $483,420 or 46.58% of the total annual budgeted amount. Water Fund (Water Department & Debt Service) expenses total $508,049 or 48.95% of budget.

Revenues:

-Water consumption (5015) billed in March for usage during the month of February is $27,783. Total consumption for the month is approximately 1,334,000 gallons more than the same month, prior year or $8,826 of revenue due to a drier than normal month.

-The Debt Service Charge (5018) and Water Service Fee (5019) remain on target with budget as these are flat fees and not related to volume charges recognized, at 50.14% and 50.46% respectively.

-The EAA Pass Thru (5036) fees are charged to customers based on usage, $3,538 was recorded for the month and 45.21% of the annual budgeted amount has been recognized to date.

Expenses:

Water department (606) expenses for the day-to-day operations are below budget with $69,171 spent this month or 41.96% utilized year to date. Engineering Services (3012) includes $6,150 for consultant engineer services relating to the Trinity Well assessment. Equipment Maint & Repair (5010) reflects the repair of radios & circuit board. Well Site #5 – Edwards Blending (6065) includes $1,500 for a camera survey and $1,600 to super chlorinate the well & related equipment. Capital – Well #5 (8095) reflects the cost to troubleshoot well issues and replace the motor.

The next debt service payments are due in August, for interest only.

Payroll:
The City is on a bi-weekly payroll; there have been 13 pay periods out of 26 so 50.00% of the budget should be expensed in the line items directly related to personnel. The Utility is below budget in the Salaries (1010) due to the vacancy in the superintendent position from before the start of the fiscal year to the end of February, which is charged 50/50 between Public Works and the Water Utility. Overtime is ahead of budget for the year at 70.95%. On top of the normal overtime for weekend well readings, this fiscal year the crew has addressed two main breaks, both on Happy Trail. TMRS (1040) expense is at 47.80%, on track with the related compensation accounts. Expense for Workers' Comp Insurance (1037), recognized quarterly, is at 34.59%, below budget due to the position vacancy. Special allowances and employee insurance accounts are also below budget due to superintendent vacancy.

COURSES OF ACTION: None related to the Report.

FINANCIAL IMPACT: N/A

STAFF RECOMMENDATION: N/A

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2020

20 -WATER FUND
FINANCIAL SUMMARY % OF YEAR COMPLETED: 50.00

	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	BUDGET BALANCE	% OF BUDGET
REVENUE SUMMARY					
NON-DEPARTMENTAL	1,037,890.00	58,289.75	483,420.25	554,469.75	46.58
TOTAL REVENUES	1,037,890.00	58,289.75	483,420.25	554,469.75	46.58
EXPENDITURE SUMMARY					
WATER DEPARTMENT	849,856.00	69,170.78	356,584.46	493,271.54	41.96
DEBT SERVICE	188,034.00	0.00	151,465.46	36,568.54	80.55
TOTAL EXPENDITURES	1,037,890.00	69,170.78	508,049.92	529,840.08	48.95
REVENUES OVER/(UNDER) EXPENDITURES	0.00	(10,881.03)	(24,629.67)	24,629.67	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2020

20 -WATER FUND
FINANCIAL SUMMARY % OF YEAR COMPLETED: 50.00

REVENUES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	BUDGET BALANCE	% OF BUDGET
NON-DEPARTMENTAL					
WATER SALES					
20-599-5015 WATER CONSUMPTION	627,000.00	27,782.81	284,803.20	342,196.80	45.42
20-599-5016 LATE CHARGES	6,000.00	965.44	2,938.78	3,061.22	48.98
20-599-5018 DEBT SERVICE	188,317.00	15,783.42	94,429.56	93,887.44	50.14
20-599-5019 WATER SERVICE FEE	58,092.00	4,895.08	29,311.76	28,780.24	50.46
20-599-5036 EAA PASS THRU CHARGE	83,681.00	3,538.00	37,830.50	45,850.50	45.21
TOTAL WATER SALES	963,090.00	52,964.75	449,313.80	513,776.20	46.65
MISC./GRANTS/INTEREST					
20-599-7000 INTEREST INCOME	12,000.00	2,150.53	7,223.49	4,776.51	60.20
20-599-7011 OTHER INCOME	0.00	2.67	12.46	(12.46)	0.00
20-599-7012 LEASE OF WATER RIGHTS	10,000.00	0.00	0.00	10,000.00	0.00
20-599-7060 CC SERVICE FEES	1,200.00	76.93	939.49	260.51	78.29
20-599-7075 SITE/TOWER LEASE REVENUE	37,200.00	3,094.87	18,559.11	18,640.89	49.89
20-599-7090 SALE OF FIXED ASSETS	0.00	0.00	408.24	(408.24)	0.00
TOTAL MISC./GRANTS/INTEREST	60,400.00	5,325.00	27,142.79	33,257.21	44.94
TRANSFERS IN					
20-599-8072 TRF IN-CAPITAL REPLACEMENT	14,400.00	0.00	6,963.66	7,436.34	48.36
TOTAL TRANSFERS IN	14,400.00	0.00	6,963.66	7,436.34	48.36
TOTAL NON-DEPARTMENTAL	1,037,890.00	58,289.75	483,420.25	554,469.75	46.58
TOTAL REVENUES	1,037,890.00	58,289.75	483,420.25	554,469.75	46.58

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2020

20 -WATER FUND
WATER DEPARTMENT % OF YEAR COMPLETED: 50.00

EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	BUDGET BALANCE	% OF BUDGET
PERSONNEL					
20-606-1010 SALARIES	206,130.00	15,362.96	89,606.35	116,523.65	43.47
20-606-1015 OVERTIME	8,000.00	368.91	5,675.85	2,324.15	70.95
20-606-1020 MEDICARE	2,990.00	229.03	1,400.94	1,589.06	46.85
20-606-1025 TWC (SUI)	720.00	432.00	432.00	288.00	60.00
20-606-1030 HEALTH INSURANCE	27,450.00	2,288.00	12,298.00	15,152.00	44.80
20-606-1031 HSA	170.00	14.80	79.55	90.45	46.79
20-606-1033 DENTAL INSURANCE	1,360.00	120.86	654.06	705.94	48.09
20-606-1035 VISION CARE INSURANCE	330.00	30.42	157.17	172.83	47.63
20-606-1036 LIFE INSURANCE	280.00	22.43	119.93	160.07	42.83
20-606-1037 WORKERS' COMP INSURANCE	6,890.00	1,057.27	2,382.94	4,507.06	34.59
20-606-1040 TMRS RETIREMENT	28,750.00	2,263.82	13,741.83	15,008.17	47.80
20-606-1070 SPECIAL ALLOWANCES	10,650.00	496.18	3,225.17	7,424.83	30.28
TOTAL PERSONNEL	293,720.00	22,686.68	129,773.79	163,946.21	44.18
SUPPLIES					
20-606-2020 OFFICE SUPPLIES	1,500.00	341.78	766.64	733.36	51.11
20-606-2030 POSTAGE	3,130.00	262.38	1,816.75	1,313.25	58.04
20-606-2035 EMPLOYEE APPRECIATION	100.00	0.00	22.49	77.51	22.49
20-606-2050 PRINTING & COPYING	600.00	401.94	425.75	174.25	70.96
20-606-2060 MED EXAMS/SCREENING/TESTING	100.00	0.00	0.00	100.00	0.00
20-606-2070 JANITORIAL SUPPLIES	100.00	69.75	69.75	30.25	69.75
20-606-2075 BANK/CREDITCARD FEES	5,100.00	464.66	5,243.42	(143.42)	102.81
20-606-2080 UNIFORMS	1,200.00	0.00	409.14	790.86	34.10
20-606-2090 SMALL TOOLS	2,000.00	141.54	1,975.69	24.31	98.78
20-606-2091 SAFETY SUPPLIES/EQUIPMENT	1,200.00	0.00	655.61	544.39	54.63
TOTAL SUPPLIES	15,030.00	1,682.05	11,385.24	3,644.76	75.75
SERVICES					
20-606-3012 ENGINEERING SERVICES	10,000.00	6,872.50	7,703.75	2,296.25	77.04
20-606-3013 PROFESSIONAL SERVICES	2,000.00	0.00	0.00	2,000.00	0.00
20-606-3020 ASSOCIATION DUES & PUBS	2,215.00	70.00	752.00	1,463.00	33.95
20-606-3030 TRAINING/EDUCATION	2,700.00	375.00	1,725.00	975.00	63.89
20-606-3040 TRAVEL/MILEAGE/LODGING/PERD	1,500.00	57.84	123.26	1,376.74	8.22
20-606-3050 INSURANCE - LIABILITY	4,075.00	0.00	3,797.87	277.13	93.20
20-606-3060 UNIFORM SERVICES	2,500.00	218.62	1,221.65	1,278.35	48.87
20-606-3070 INSURANCE - PROPERTY	1,985.00	0.00	1,850.00	135.00	93.20
20-606-3075 CONSERV. ED./REBATES	100.00	0.00	0.00	100.00	0.00
20-606-3080 SPECIAL SERVICES	500.00	21.85	451.05	48.95	90.21
20-606-3082 WATER ANALYSIS FEES	6,500.00	50.00	2,687.70	3,812.30	41.35
TOTAL SERVICES	34,075.00	7,665.81	20,312.28	13,762.72	59.61
CONTRACTUAL					
20-606-4075 COMPUTER SOFTWARE/INCODE	9,066.00	277.16	5,330.02	3,735.98	58.79
20-606-4085 EAA -WATER MANAGEMENT FEES	84,084.00	6,586.52	40,779.15	43,304.85	48.50
TOTAL CONTRACTUAL	93,150.00	6,863.68	46,109.17	47,040.83	49.50

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2020

20 -WATER FUND
WATER DEPARTMENT % OF YEAR COMPLETED: 50.00

EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	BUDGET BALANCE	% OF BUDGET
MAINTENANCE					
20-606-5005 EQUIPMENT LEASES	1,500.00	0.00	150.00	1,350.00	10.00
20-606-5010 EQUIPMENT MAINT & REPAIR	5,000.00	1,610.26	4,192.91	807.09	83.86
20-606-5015 ELECTRONIC EQPT MAINTENANCE	500.00	0.00	177.29	322.71	35.46
20-606-5020 VEHICLE MAINTENANCE	3,000.00	49.54	432.39	2,567.61	14.41
20-606-5030 BUILDING MAINTENANCE	2,500.00	0.00	258.43	2,241.57	10.34
20-606-5060 VEHICLE & EQPT FUELS	4,000.00	134.98	1,929.71	2,070.29	48.24
TOTAL MAINTENANCE	16,500.00	1,794.78	7,140.73	9,359.27	43.28
DEPT MATERIALS-SERVICES					
20-606-6011 CHEMICALS	16,500.00	326.50	5,448.45	11,051.55	33.02
20-606-6050 WATER METERS & BOXES	4,500.00	0.00	1,460.20	3,039.80	32.45
20-606-6055 FIRE HYDRANTS & VALVES	7,000.00	0.00	8,940.59	(1,940.59)	127.72
20-606-6060 HUEBNER STORAGE TANK	5,000.00	0.00	10,288.46	(5,288.46)	205.77
20-606-6061 ELEVATED STORAGE TANK- #1 W	4,750.00	0.00	198.75	4,551.25	4.18
20-606-6062 WELL SITE #2-EAA MONITORED	1,300.00	0.00	0.00	1,300.00	0.00
20-606-6063 WELL SITE #3-NOT OPERATION	1,800.00	0.00	0.00	1,800.00	0.00
20-606-6064 WELL SITE #4-NOT OPERATION	1,300.00	0.00	910.48	389.52	70.04
20-606-6065 WELL SITE #5-EDWARDS BLENDI	4,000.00	3,808.34	4,031.83	(31.83)	100.80
20-606-6066 WELL SITE #6-MUNI TRACT	4,000.00	1,547.74	1,770.63	2,229.37	44.27
20-606-6067 WELL SITE #7	4,000.00	225.00	3,897.89	102.11	97.45
20-606-6068 WELL SITE #8	4,000.00	0.00	222.89	3,777.11	5.57
20-606-6069 WELL SITE #9-TRINITY	4,000.00	0.00	562.50	3,437.50	14.06
20-606-6070 SCADA SYSTEM MAINTENANCE	7,000.00	0.00	4,822.45	2,177.55	68.89
20-606-6071 SHAVANO DRIVE PUMP STATION	22,500.00	483.32	9,388.78	13,111.22	41.73
20-606-6072 WATER SYSTEM MAINTENANCE	22,500.00	704.61	11,372.00	11,128.00	50.54
20-606-6080 STREET MAINT SUPPLIES	1,500.00	0.00	2,406.00	(906.00)	160.40
TOTAL DEPT MATERIALS-SERVICES	115,650.00	7,095.51	65,721.90	49,928.10	56.83
UTILITIES					
20-606-7040 UTILITIES - ELECTRIC	75,000.00	4,080.07	24,855.23	50,144.77	33.14
20-606-7042 UTILITIES - PHONE/CELL	825.00	111.00	666.00	159.00	80.73
20-606-7044 UTILITIES - WATER	300.00	34.70	218.51	81.49	72.84
TOTAL UTILITIES	76,125.00	4,225.77	25,739.74	50,385.26	33.81
CAPITAL OUTLAY					
20-606-8015 NON-CAPITAL - COMPUTERS	750.00	0.00	724.40	25.60	96.59
20-606-8020 NON-CAPITAL MAINTENANCE EQU	1,000.00	0.00	840.24	159.76	84.02
20-606-8080 WATER SYSTEM IMPROVEMENTS	28,700.00	0.00	23,856.67	4,843.33	83.12
20-606-8087 WATER METER REPLACEMENT	14,400.00	0.00	6,963.66	7,436.34	48.36
20-606-8095 CAPITAL - WELL #5	0.00	17,156.50	17,156.50	(17,156.50)	0.00
TOTAL CAPITAL OUTLAY	44,850.00	17,156.50	49,541.47	(4,691.47)	110.46
INTERFUND TRANSFERS					
20-606-9010 TRF TO GENERAL FUND	22,050.00	0.00	0.00	22,050.00	0.00
20-606-9020 TRF TO CAPITAL REP. FUND 72	138,706.00	0.00	0.00	138,706.00	0.00
20-606-9050 BAD DEBT EXPENSE	0.00	0.00	860.14	(860.14)	0.00
TOTAL INTERFUND TRANSFERS	160,756.00	0.00	860.14	159,895.86	0.54
TOTAL WATER DEPARTMENT	849,856.00	69,170.78	356,584.46	493,271.54	41.96

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2020

20 -WATER FUND
DEBT SERVICE % OF YEAR COMPLETED: 50.00

EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	BUDGET BALANCE	% OF BUDGET
CAPITAL OUTLAY					
20-607-8014 2009 GO REFUND - PRINCIPAL	40,073.00	0.00	40,072.50	0.50	100.00
20-607-8015 2009 GO REFUND - INTEREST	801.00	0.00	801.45	(0.45)	100.06
20-607-8016 2017 GO REFUNDING (2009) PR	70,000.00	0.00	70,000.00	0.00	100.00
20-607-8017 2017 GO REFUNDING (2009) IN	66,400.00	0.00	33,550.00	32,850.00	50.53
20-607-8030 BOND AGENT FEES	200.00	0.00	200.00	0.00	100.00
20-607-8056 2018 GO REFUNDING (2009) PR	3,083.00	0.00	3,082.50	0.50	99.98
20-607-8057 2018 GO REFUNDING (2009) IN	7,477.00	0.00	3,759.01	3,717.99	50.27
TOTAL CAPITAL OUTLAY	188,034.00	0.00	151,465.46	36,568.54	80.55
TOTAL DEBT SERVICE	188,034.00	0.00	151,465.46	36,568.54	80.55
TOTAL EXPENDITURES	1,037,890.00	69,170.78	508,049.92	529,840.08	48.95
REVENUES OVER/(UNDER) EXPENDITURES	0.00	(10,881.03)	(24,629.67)	24,629.67	0.00

Water Advisory Committee Agenda Form

Meeting Date: May 11, 2020 Agenda item: 6.a

Prepared by: Brandon Peterson Reviewed by: Bill Hill

AGENDA ITEM DESCRIPTION:

Discussion / Action – Replacement options for future water meters: "Drive-by" vs. "Cellular" data collection - PW Director

[X] **Attachments for Reference**: 1) New Drive-by Reader Cost
2) Cost Comparison between new Meters

BACKGROUND / HISTORY: The City purchased the Badger Meter system in February 2007. The meters purchased at the time were CE (Classic Endpoint) which consists of two components:

1) a brass meter body (25 year life)
2) a register and endpoint (with a 10 year battery)

At the end of each month, Public Works reads each meter's water usage by driving through the city with a meter reader. The meter reader is able to read data that is transmitted by the meters and store the data onto the reader where it is downloaded and used to calculate water bills.

In 2013, some of the registers started having issues and not accurately recording the water flowing through the meters. Once notified of the problem, Badger came and swapped out all the meters with the faulty registers under warranty. In January 2017, the drive-by software was upgraded. Each year since 2013, we have replaced some water meters, however the majority of the existing meters are original from 2007.

In December 2019, Badger informed the City that they discontinued the meter model that we currently use (CE) in order to improve and advance new technology. Badger's new drive-by replacement model is called the ME (Migratable Endpoint). Additionally, Badger now offers cellular meters which can be read through AT&T Cellular network. Therefore, only ME or Cellular Badger meters are available for future replacement.

The Cellular meter transmits readings near constantly through cell towers. This allows both the resident and the City access to that information almost immediately. Using the APP software, residents themselves can constantly monitor usage from a computer or smart device. The APP can detect leaks, see min/hour/daily/monthly usage. Currently, the info is available monthly after the meters are read. Because of the advantages available to the residents who have a

cellular system, six residential properties who experienced reoccurring water challenges have already opted into the use of the cellular meter system. This allows them to track real-time water usage. In exchange for offering the cellular system, these six residents pay the small difference in the monthly fee normally paid to Badger ($0.89 / monthly)

DISCUSSION:

For the month ending January 2020, there were 47 meters that were not read by the drive through meter reader. PW staff was then required go to each residence and manually read and record water usage. For February there were 99 meters and in March there was 115 meter not reading. Staff troubleshooting has determined that meters not read during the drive-by because the batteries had failed. We can assume over time that the number of meters unable to be read will increase as there are 476 meters that are originally installed in January/February 2007 and have not been replaced.

Because the components (including the battery) of our original CE meters are no longer available, the City can replace the inoperable meters with the similar "drive-by system (ME) or replace them with a cellular system.

ME. If the City opts to stay with the drive-by system (new ME), a new ME meter reader will need to be purchased (unfortunately, the City's CE drive-by reading equipment will not read the newer ME meters). During the drive-by reading, both CE and ME systems could be driven at the same time. The cost of the additional equipment would be approximately $2,000. (see attachment 1). The readings and information from both system readers would be able to be uploaded into INCODE and the bills would then be processed.

Cellular. If the City moves to the Cellular reading system for replacements, then there would be a gradual swap out of meters over time. Because the meters are constantly read by cellular, the importing of the individual cellular meters is programed to occur at the same time the data file from the drive-by readings are imported into INCODE. During this transition period, the City will read meters using two systems, similar to what we are doing now.

Staff frequently use "data profiles" from the monthly readings to discuss usage and leaks with customers. This consumes a substantial amount of time. With customer awareness of their own data profile throughout the month by using cellular, the amount of problems are expected to be reduced.

Meter Costs. The costs of meters has gradually increased over the years. The cost of a cellular meter is slightly higher that ME. Regardless of which meter we select, the replacement costs will likely exceed the available funds in the Capital Replacement Fund or the amount received annually from the "Water Service Fee" ($59,280). A future rate increase in the Water Service Fee may need to be reviewed.

Below is a comparison chart:

	Cellular (Orion LTE-M)	**ME** (Orion)
Cost per meter	$273.89	$256.75
Cost per month	$7.34	$7.34
Software	$0.89	$0.06
Hardware	$300/annually	Not required
Warranty	25 yr brass body/10 yr endpoint/register	25 yr brass body/10 yr endpoint/register
Data Profile	Resident has full access	Contact PW to obtain Monthly

*Costs are all based on a ¾" service meter (398 of 711 are ¾" meters)

Currently, the City pays a "drive-by" meter software fee of $0.06 / meter / month. Total = ($511.92/year).

- The ME style meters would be the same cost. Total = ($511.92/year).
- The cellular style meter software fee is $0.89 / meter / month Total = ($7,593.48 / year once all 711 meters eventually outfitted as cellular).

If the City chooses to start replacing the CE with cellular, then the extra $0.83 cost per month must be considered. Option 1 is to transfer the cost to the customer. This would require a fee schedule change (water rate increase). NOTE: At this time, the Residents that have requested a cellular meter have also agreed to pay the additional fee. City has added a line within INCODE called software fee. Option 2 is for the City to absorb the cost, at least initially. Considering that in this current FY, only 82 meters are projected to be replaced, it seems reasonable for the City to be able to absorb this cost. As we budget next year the number of meters to be replaced, we will likely have to address the cost if we do not immediately address.

If the City was to continue to pay the $0.89 per month increase. This fee would initially come from fund balance. At a later time, the City could consider a small fee increase.

COURSES OF ACTION: The City has funds to purchase 82 cellular meters in this year's fiscal budget. A recommendation needs to be prepared for Council.

COA 1: Replace CE with ME

COA 2: Replace CE with Cellular and absorb cost (for now; consider fee change later)

COA 3: Replace CE with Cellular and pass cost to customer ($0.89 / month)

FINANCIAL IMPACT:

¾" Meter	Ea. Meter Cost	82 meters Cost	1 Meter monthly fee	82 meters Monthly fee	82 meters Annual fee
Orion LTE-M (Cellular)	$273.89	$22,458.98	$0.89	$72.98	$875.76
Orion ME	$256.75	$21,053.50	$0.06	$4.92	$59.04

NOTE: The cost per meter varies with the size. The cost above is for a ¾" meter. The costs for other sizes is approximately the same difference.

STAFF RECOMMENDATION: Staff recommends incrementally replacing old meters with the Cellular read system and fund the small increase from fund balance. In the future, consider increasing the monthly water service fee to cover the cost.

Water Advisory Committee Agenda Form

Meeting Date: May 11, 2020 | Agenda item: 6.b

Prepared by: Brandon Peterson | Reviewed by: Bill Hill

AGENDA ITEM DESCRIPTION:

Discussion/Update – Trinity Well Discussion/Update – PW Director

[X] **Attachments for Reference**: a. Well 9 Video Inspection Review (Consultant)

BACKGROUND / HISTORY: Updates highlighted. On March 14, 2019 the Miox stopped generating chlorine to treat the water produced by the Trinity well, thus requiring the Trinity well to be taken offline.

The initial quote received from Miox was to replace the Miox cabinet for approximately $60k. I initiated an assessment to determine whether we needed to continue using Miox or switch to an alternate hyper chlorite system.

In June, I later engaged subject matter experts Grant Snyder (Geologist who helped start the initial Trinity Well, and Lou Portillo who is a water treatment engineer. Grant Snyder suggested the City take water sample of the Trinity Aquifer to determine the water quality. The water tests results came back with equal results as the startup tests. Grant recommended keeping the Miox system due to the water quality test results.

On July 30th Water Resources Corp. (WRC) removed the cabinet and shipped to Miox in Sugarland Texas. In early August, Miox sent a quote with 3 options for repairs or replacements, City selected replacement of components that were necessary.

In mid-October, WRC installed and tested the Miox cabinet. Upon completion of the install, Public Works staff continued other preparations in order to place the well back in operation. Staff noticed a decline in production, and called upon Advanced Water Well Technologies (AWWT) for a professional opinion. November 1st, AWWT determined there is either a hole in a bowl (Trinity has 14 bowls), or the pump. AWWT advised that there could be risk and if we ran the well it could cause further damage to other equipment. City considered their advice and decided to place the well back online and monitor closely.

On November 15th I placed the well back in operation with a pump rate of 205 gal/min. and by November 20th the pump rate dropped to 182 gal/min. which is a significant drop in 5 days. The resulting drop is gals/min results in the Well running almost constantly (not good). Again, consulting with AWWT they believe there is a hole in the pump or one of the bowls, which need repairing.

On February 6th AWWT pulled the Trinity well to determine the reason for why the well lost

production. A meeting with AWWT, Engineer Consultant and City Staff was held on February 11th to show the motor seals were blown, and pump cast iron bowls 1-4 were pitted, while ductile iron bowls 5-14 were fine; as well as all the stainless steel impellers.

On March 9th WAC members discussed the next step to run a camera survey and a gamma test to determine the integrity of the well and see if additional funds should be utilized to get the well restored and placed back in operation. March 17th camera survey was completed and sent to the engineer consultant for his review and recommendations. Engineer provided his review in attachment A.

DISCUSSION: Over the winter break I sent another water chemistry sample off to the lab for further analysis. Results came back a week later, and I requested Grant Snyder to review the results and provide some guidance as to what can be done. If any of the results differ from when the well originally started, then to explain the good and the bad.

Things to keep in mind also, since the Trinity has been down for so long:

- Residents have not complained about the water quality (yellow/rusty color)
- Less staff time checking all the equipment at Well #1.
- Lots of maintenance expenses too annually or every other year.

Basic review of the engineers report is as follows:

- From 16 ft to 40 ft in the hole the casing is moderately corroded with significant surface delamination and pitting.
- Some minor corrosion the rest of the way down the casing to the water surface elevation.
- Mineral precipitation on the screened zone is heavy, with very significant blockage of the 1/8 inch slots
- Mineral precipitation below the screened interval from 1006 ft to the well bottom at 1173 ft, is moderate.
- There is a 16 ft section of broken pipe, a section of 1 inch sample tubing that was broken off in a previous exploration.
- The aquifer static water level has declined since the initial install. Water quality often degrades as the aquifer level declines, due to contributing flows shifting toward deeper water bearing strata that often contain higher TDS concentrations.

In order to restore the well, the following actions are likely:

- Agitate the well screens via brushing or acidizing the well
- Install a new stainless steel pump and motor (Motor only if needed)
- Refurbish existing stainless steel water column pipe/couplings where needed

- Adjust chemical treatment process, convert to different treatment injections

After the April 13 meeting, members requested a cost update to place the trinity well into a "moth ball state".

COURSES OF ACTION: Therefore, this leaves the City with limited options.

1. City can abandon the well and plug it completely – No, leave as a future reserve in case of drought.
2. City can restore the well – This will cost approximately $120,000 to rehab and to received an average of 3 years operation
3. City can cap the well and hold it in an idle position until needed in the future. – Members requested an approximate cost to place the well and all its equipment in a moth ball state.

FINANCIAL IMPACT: A couple options are as follows:

#1 – Pull and inspect the pump, will cost approximately $3,500 (Completed)

#2 – If we restore the well back to service, estimated cost is $70,000, this includes casing corrosion evaluation, casing cathodic protection, casing plug for the lower 10 ft, casing cleaning, well pump test, installation of new/existing equipment, sodium hypochlorite (liquid bleach) and potassium permanganate (mitigate taste and odor), iron filter replacement (replacing the media inside the sand filters)

#3 – If the City abandons the well and plugs it per TCEQ requirements, the estimated cost is $70,000 this includes, plugging the well and all supplies required, and restorations and landscaping needed on the surface.

#4 – If the City caps the well and leaves it opened for future use, the estimated cost is $32,000. This includes Casing corrosion evaluation, casing cathodic protection, temporary well cap, transmission line temporary cap/clean out, and treatment system cleaned out for temporary storage.

- AWWT - Capping the well with a blind flange and welding to the well casing. - $400
- Water Resources – Cleaning out all parts and equipment within the Miox - $1,500
- Bob Johnson – Clean all the sand media out of the filter tanks, clean the backwashing system, and place into a "moth ball state" - $2,400
- Contact Trinity Glen Rose Authority no permit or documentation is needed.
- Corrosion and cathodic protection engineer/installation costs $15,000

STAFF RECOMMENDATION: Staff recommends placing the well into an idle state until further need arises.

WATER ADVISORY COMMITTEE STAFF SUMMARY

Meeting Date: May 11, 2020 Agenda item: 6.c

Prepared by: Brandon Peterson Reviewed by: Bill Hill

AGENDA ITEM DESCRIPTION:

Water Department Budget Goals and Objectives for FY 2020-21 Proposed Budget

[X] **Attachments for Reference**:

1) Water Department Proposed Goals and Objectives

BACKGROUND / HISTORY: Water Utility Department is bringing the goals and objectives for FY 2020-21 to the Water Advisory Committee (WAC) for their review and comments.

DISCUSSION: This is the first review of the goals and objectives for FY 2020-21 presented to the Water Advisory Committee. This will be the first round for discussion, next month will be the final round before presenting it to City Council as the final from the WAC.

COURSES OF ACTION: Discuss the goals and objectives for FY 2020-21 and provide any recommendations as to what the Water Advisory Committee would like to see accomplished over the next year.

FINANCIAL IMPACT: Varies depending on the proposed studies and projects accepted.

STAFF RECOMMENDATION: Provide input for goals and objectives for FY 2020-21 Budget

Water Utility Department - 606

Mission Statement

The City of Shavano Park Water Utility Department continuously provides safe and reliable drinking water and maintains essential public water infrastructure for the service connections within Shavano Park in order to provide long-term first-class water utility support to our citizens.

Goals:

- Continually provide safe and reliable drinking water through efficient treatment and delivery of water, meet or exceed environmental and public health standards
- Resource and maintain appropriate equipment and assets
- Improve employee proficiency to include educational training and development opportunities
- Improve water system functions to achieve an efficient operation level while meeting State requirements
- Provide and maintain essential public water infrastructure services while anticipating future requirements

Objectives:

Continually provide safe and reliable drinking water through efficient treatment and delivery of water, exceeding environmental and public health standards

- Maintain 100% compliance of all State and Federal regulations and laws associated with a water system
- Maintain a Superior Water System rating
- Ensure State requirements are met by having all employees of the Water Department certified and licensed in groundwater operations
- Educate the public while implementing the backflow prevention program approved by Council in accordance with an appropriate strategy
- ~~Inventory~~ Monitor all backflow devices within the water system to make sure they maintain compliance with City ordinance and TCEQ requirements

Resource and maintain appropriate equipment and assets

- Maintain enough money in reserve to handle emergencies, and cushion for low water consumption years (approx. $500K)
- Annually re-evaluate adequacy of Edwards water rights and Trinity resources
- Continue to replace meters that have registered approximately 2 million gallons
- Actively apply for grants/funding for other equipment that would make crews more efficient
- Continue working with KFW (City Engineer) to initiate a geographic information system (GIS) program to include utilities, streets, and drainage information
- Continue preparing a schedule based on needs to replace all undersized water mains within the system
- Based on power supply needs, initiate applying for grants to pay a portion of or all costs for installation of emergency power supply (generators) for City ~~buildings~~ facilities
- Actively support a water rate study to determine if the tiered water rates/water service fee should be restructured/increased

Improve employee quality to include educational training and development opportunities.

- Provide additional quality educational opportunities and send crews to classes to earn credits to upgrade and improve knowledge of water systems
- Continue to have a safe working environment and maintain the safety and training program on all equipment and water system functions
- Maintain a safe working environment and a zero (0) lost time accident rate, initiate lost accident tally board.
- Improve the preventative maintenance program by establishing a tracking schedule for each piece of equipment/vehicle and when they should be replaced

Improve water system functions to achieve an efficient operation level and meet State requirements

- ~~Investigate alternatives to increase productivity and life expectancy of the Trinity Well pump, motor, and ground storage tank~~
- Continue to take corrective action on dead end main issues to lessen flushing and reduce loss ratio rate
- Work with TxDOT ~~on preliminary reports for~~ to prepare relocating portions of the water mains on NW Military ~~prior to job bid for~~ during MPO project construction starting in February
- Identify cul-de-sac dead end mains, including gross cost estimate for each and prioritization for addressing. Complete remediation of at least one such dead end main each year until all resolved
- Stay current on new and proposed TCEQ water system requirements.
- Propose updates for Shavano Park Ordinances to meet all TCEQ and pertinent Edwards Aquifer Authority requirements
- Achieve annual water loss of less than 5%
- Respond to all water system complaints within one service day. Provide summary of complaints and resolutions to Water Advisory Committee
- Raise/install 5 fire hydrants with valves to proper height for Fire Department access per year
- Prepare drainage culvert to install boxes for crossing the creek to Well site # 8
- Consider outsourcing printing water utility bills
- Televise and investigate options of some or all wells not in production, evaluate possibilities to place back in production or plug. (Wells #1, #2, #3, and #4)
- Inspect all valves along NW Military prior to start of construction, repair/replace/install valves where needed to reduce number of residents that will be impacted during water line replacement.

Provide and Maintain essential public water infrastructure and services while anticipating future requirements.

- Develop and execute a fiscally responsible budget that meets mission requirements
- Update the capital equipment replacement schedule. (Water system, pumps, motors, VFD's, water mains, and hydrants)
- Maintain quality of new SCADA system and entire water system as changes and repairs are accomplished~~; update computers operating systems to Windows 10.~~

WATER UTILITY FUND PERFORMANCE MEASURES:				
Description:	Actual FY17-18	Actual FY18-19	Projected FY19-20	Target FY19-20
Number of Water Meters Installed	39	76	100	100
Number of Fire Hydrants Maintained or Repaired	5	10	8	5
Number of Dead End Mains Flushed	17	15	15	15
Number of Taste and Odor Complaints	31	26	7	0
Lost Water Ratio	4.46%	6.62%	4.03%	5.00%

The Shavano Park Water Utility has approximately 711 customers and provides water service only, no sanitary sewer.