

The City of Durant encourages participation from all its citizens. If participation at any public meeting is not possible due to a disability, notification to the City Clerk at least 48 hours prior to the scheduled meeting is encouraged in order to make the necessary accommodations. The City of Durant may waive the 48-hour rule if interpreters for the deaf (signing) or translation services for limited English proficient (LEP) individuals are not the necessary accommodation.

THE DURANT CITY UTILITIES AUTHORITY / DCUA

6:00 PM

AMENDED AGENDA
Roscoe J. Hatfield
Council Chambers, 300
West Evergreen,
Durant, Oklahoma
AGENDA

April 11, 2017

DURANT CITY HALL
300 W. EVERGREEN, DURANT, OK
ROSCOE J. HATFIELD COUNCIL CHAMBERS

CALL TO ORDER

ROLL CALL

ORDER OF BUSINESS

1. Consent Items

To help streamline meetings and allow the focus to be on other items requiring strategic thought, the "Consent Items" portion of the agenda groups the routine, procedural, and self-explanatory non-controversial items together. These items are voted on in a single motion (one vote). However, any Council member requesting further information on a specific item thus removes it from the "Consent Items" section for individual attention and separate vote.

- a. Consider Approval of Regular Meeting Minutes of March 14, 2017

2. Consider Items Removed from Consent

3. Information Items

- a. Solid Waste Collection Report March 2017
- b. Water Treatment Plant Monthly Operation Reports - March 2017
- c. Landfill Information & Reports - March 2017
- d. Waste Water Treatment Plant Monthly Report - March 2017
- e. Waste Water Treatment Plant Lab Monthly Report - March 2017
- f. Durant City Utility Authority Monthly Reports - February and March 2017

4. Administration

- a. Consider Approval of Request for Authorization to Purchase for Water Leak Detection Study (RFAP# 2017-051)
- b. Consider Approval of Leak Detection Study with Wall Engineering (Work Order #DU-17-02) (C-2017-16)

ADJOURNMENT

CERTIFICATE

This is to certify that in conformity with the Oklahoma Open Meeting Act, public notice of the date, time and place of this meeting was filed with the City Clerk of Durant on the 17th day of November, 2016 and that an amended agenda of said meeting was posted at the place of such meeting at 2:25 pm on the 10th day of April, 2017.

Cynthia J. Price, City of Durant



The City of Durant

Office of City Clerk

Memorandum

Date: 3/28/2017
To: Utilities Authority
From: Cynthia J. Price, City Clerk
Re: Consider Approval of Regular Meeting Minutes of March 14, 2017

Council Information / Action Requested

Approve Regular Meeting Minutes of March 14, 2017

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
Minutes - March 14, 2017	Exhibit	3/28/2017

Agenda posted on Durant City Hall Entry Door at This is to certify that in conformity with the Oklahoma Open Meeting Act, public notice of the date, time and place of this meeting was filed with the City Clerk of Durant on the 17th day of November, 2016 and that an agenda of said meeting was posted at the place of such meeting at 11:35 a.m. on the 10th day of March, 2017.

MINUTES OF THE REGULAR SCHEDULED MEETING OF THE DURANT CITY UTILITIES AUTHORITY OF March 14, 2017 AT 6:00 PM, Roscoe J. Hatfield Council Chambers, 300 West Evergreen, Durant, Oklahoma

CALL TO ORDER

Chairman Hoffman called the meeting to order at 6:51 p.m.

ROLL CALL

Present: Trustee Billy L. Orr	City Attorney Pat Phelps
Vice-Chairman Destry Hawthorne	City Manager Tim Rundel
Chairman Stewart Hoffman	City Clerk Cynthia J. Price

(*denotes partial attendance)

Absent: Trustee Chad Hitchcock
Trustee Jerry Tomlinson

Chairman Hoffman declared a quorum.

1. Consent Items

To help streamline meetings and allow the focus to be on other items requiring strategic thought, the "Consent Items" portion of the agenda groups the routine, procedural, and self-explanatory non-controversial items together. These items are voted on in a single motion (one vote). However, any Council member requesting further information on a specific item thus removes it from the "Consent Items" section for individual attention and separate vote.

a. Consider Approval of Regular Meeting Minutes of February 14, 2017

Approved

Motion was made by Destry Hawthorne and seconded by Bill Orr to approve consent item as presented. Motion Passed with the following vote:

Ayes: Hawthorne, Hoffman, Orr

Absent: Hitchcock, Tomlinson

2. Consideration Items Removed from Consent

3. Information Items

- a. Landfill Information & Reports - February 2017
- b. Water Treatment Plant Operation Reports - February 2017
- c. Solid Waste Collection Report - February 2017
- d. Waste Water Treatment Plant Report - February 2017
- e. Water and Sewer Line Maintenance and Operations Monthly Report - February 2017

4. Administration

Adjournment

Motion was made by Destry Hawthorne and seconded by Bill Orr to adjourn meeting.
Motion Passed with the following vote:

Ayes: Hawthorne, Hoffman, Orr

Absent: Hitchcock, Tomlinson



The City of Durant

Office of the Solid Waste Department

Memorandum

Date: 4/11/2017
To: Utilities Authority
From:
Re: Solid Waste Collection Report March 2017

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
Solid Waste Collection March Monthly Report	Cover Memo	3/31/2017



THE CITY OF DURANT

Office of the Solid Waste Superintendent

SOLID WASTE PROJECTS SCHEDULE ***March 2017***

A. Work Completed:

1. Picked up & emptied 282 roll-offs
 2. Picked up & emptied 69 compactors
 3. Delivered 9 roll-offs to new customers
 4. Delivered and picked up 20 Sharp containers
 5. Picked up 48.55 tons of extra hauling
 6. Hauled 46 loads of extra hauling to the landfill
 7. Hauled 5 loads of recycling
 8. Hauled 3.05 ton of recycling
-

B. Work Planned For April

1. Refurbish. Dumpsters

C. Work Planned For Jan. '1-17 – Dec. 31-17

1. Pick up trash

D. Projects Planned And Requested For Authorization:

1. None.



The City of Durant

Office of the Water Treatment Plant

Memorandum

Date: 4/2/2017
To: Utilities Authority
From: Phillip Hightower
Re: Water Treatment Plant Monthly Operation Reports - March 2017

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
March Fluoride report	Cover Memo	4/2/2017
March Monthly Operation report	Cover Memo	4/2/2017
March Monthly Operation report	Cover Memo	4/2/2017
March ClO2 and Chlorite report	Cover Memo	4/2/2017
March maintance report	Cover Memo	4/2/2017

Oklahoma State Department of Health / Oklahoma Department of Environmental Quality
MONTHLY OPERATION REPORT
RECORD OF FLUORIDE APPLICATION

PWSID 1010601 SYSTEM Durant Ok (SW) MONTH March
Type of Material Applied* Sodium Silicofluoride Year 2017

Date	Water Treated (1000s of Gallons)	Applied		Residual Fluoride (F), ppm			
		lbs.	PPM of F	Raw		Distribution	
				(1)	(2)	(1)	(2)
1	3423	43	0.89	0.00	0.08	0.81	0.53
2	3810	42	0.78	0.20	0.11	0.77	0.70
3	3640	38	0.74	0.00	0.10	0.64	0.58
4	3785	47	0.88	0.06	0.00	0.62	0.39
5	3789	40	0.75	0.38	0.07	0.58	0.72
6	3785	27	0.50	0.34	0.00	0.82	0.80
7	3490	42	0.85	0.03	0.00	0.76	0.49
8	3405	42	0.88	0.29	0.00	0.34	0.80
9	3530	33	0.67	0.30	0.42	0.69	0.97
10	3766	42	0.79	0.05	0.09	0.29	0.44
11	3579	44	0.87	0.04	0.00	0.24	0.01
12	3194	34	0.76	0.17	0.00	0.62	0.61
13	3234	37	0.82	0.01	0.00	0.61	0.65
14	3085	40	0.92	0.11	0.18	0.67	0.58
15	2737	42	1.10	0.29	0.11	0.98	0.77
16	3774	45	0.85	0.16	0.18	0.78	0.60
17	3983	45	0.80	0.00	0.00	0.52	0.71
18	3902	47	0.85	0.20	0.00	0.98	0.37
19	3995	36	0.64	0.29	0.70	0.76	0.74
20	3983	43	0.76	0.03	0.65	0.87	0.65
21	3964	43	0.77	0.23	0.02	1.16	0.75
22	4001	45	0.80	0.00	0.00	0.84	0.76
23	3985	35	0.62	0.16	0.01	0.75	0.73
24	3917	40	0.72	0.13	0.00	0.61	0.31
25	3955	44	0.79	0.07	0.25	0.83	0.59
26	3663	41	0.79	0.32	0.14	0.92	0.60
27	3205	38	0.84	0.16	0.13	0.96	0.62
28	3221	40	0.89	0.08	0.30	0.98	0.85
29	3364	36	0.76	0.34	0.00	0.96	0.63
30	3919	42	0.77	0.16	0.17	0.61	0.53
31	4077	44	0.77	0.00	0.00	0.42	0.16
Total	113160	1257	24.62	4.59	3.71	22.39	18.64
Average	3650	41	0.79	0.15	0.12	0.72	0.60

* Example: Sodium Fluoride, Sodium Fluorosilicate (Sodium Silicofluoride), and Fluorosilicic Acid (Hydrofluorosilicic Acid).

It is required that this report be received by the 10th of the following month.

Send to: OSDH – Dental Health Services
1000 NE 10TH ST
OKLAHOMA CITY, OK 73117-1299

AND

Oklahoma Department of Environmental Quality
PO BOX 1677
OKLAHOMA CITY, OK 73101-1677

I hereby certify the above to be correct to the best of my knowledge.

Signed _____
Title _____
City _____

Mail original before the 10th of the following month
to the Department of Environmental Quality, Water Quality Division
P. O. Box 1677, Oklahoma City, OK 73101-1677

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY OPERATIONAL REPORT
WATER TREATMENT PLANTS

Plant: Durant Water Treatement P
PWSID: 1010601
Month: March 2017
Population: 19,491

Durant City Utilities Authority
System
PO Box 578
Address
Durant OK
City
74702
ZIP

DAY	WATER TREATED	FILTER OPERATION								WASH WATER IN 1000 GALS.	CHEMICALS USED-LBS.								ALKALINITY								pH			CaCO3 STABILITY Method:	HARDNESS (ppm)			Chlorite residual	Chlorite lbs/day	REMARKS	
		FILTERS USED-HOURS									ALUM	LIME	POLYMER Name:		CARBON	OTHER Name: NH2SIF6	OTHER Name: copper sul	CHLORINE		"P"		TOTAL AM		CLO2 Residual		TOTAL PM		AM			AM	FILT	FILT				
		1	2	3	4	5	6	7	8									PRE	POST	RAW	FILT	RAW	FILT	RAW	FILT	RAW	FILT	RAW	FILT								RAW
1	3,423	24	23	23	24	24	24	24	24	60	1000	0	50	0	0	43	0	100	60			248	206		0.14	254	220	7.8	7.1	7.1	162	272	230	0.61	260		
2	3,810	23	24	24	23	24	24	24	24	60	1200	0	50	0	0	42	0	100	40			260	224		0.11	254	230	9	7.1	7.2	210	274	250	0.52	260		
3	3,640	24	24	24	24	24	24	23	23	70	1300	0	50	0	0	38	0	100	60			268	240		0.1	268	242	8	7.4	7.3	220	280	270	0.47	260		
4	3,785	24	24	24	24	23	23	24	24	70	1200	0	50	0	0	47	0	100	60			258	226		0.08	264	230	7.9	7.2	7.4	218	302	272	0.47	260		
5	3,789	24	23	23	24	24	24	24	24	60	1100	0	50	0	0	40	0	80	60			262	244		0.14	256	234	7.8	7.1	7.3	246	280	260	0.52	260		
6	3,785	23	24	24	24	23	24	24	24	60	1000	0	50	0	0	27	0	80	60			260	234		0.22	264	240	7.9	7.3	7.3	248	270	266	0.61	260		
7	3,490	24	24	24	24	24	24	24	23	60	1600	0	50	0	0	42	0	100	60			260	244		0.07	262	242	8	7.2	7.3	248	276	278	0.57	260		
8	3,405	24	24	24	24	23	23	24	24	60	1200	0	50	0	0	42	0	40	60			262	248		0.15	264	252	7.9	7.2	7.3	240	286	272	0.52	260		
9	3,530	24	23	23	24	24	24	24	24	60	1100	0	50	0	0	33	0	70	70			270	238		0.15	264	240	7.8	6.9	7.2	240	280	270	0.52	280		
10	3,766	23	24	23	24	24	24	24	24	70	1300	0	50	0	0	42	0	50	70			264	240		0.13	256	246	7.8	7.1	7.3	240	278	280	0.47	280		
11	3,579	24	24	24	24	24	24	23	23	70	1200	0	50	0	0	44	0	50	70			270	248		0.16	274	268	7.8	7.1	7.3	230	290	274	0.42	280		
12	3,194	24	24	24	24	23	23	24	24	60	1300	0	50	0	0	34	0	50	60			262	238		0.17	252	244	8	7.5	7.5	246	268	266	0.52	240		
13	3,234	24	23	23	24	24	24	24	24	60	1000	0	50	0	0	37	0	50	60			266	234		0.12	264	232	8	7.5	7.3	250	272	264	0.38	240		
14	3,085	23	24	24	23	24	24	24	24	60	1000	0	50	0	0	40	0	50	50			268	248		0.12	266	244	8.1	7.5	7.5	248	280	270	0.33	240		
15	2,737	24	24	24	24	24	24	23	23	60	900	0	50	0	0	42	0	50	50			254	236		0.11	256	240	7.9	7.1	7.2	240	298	280	0.28	260		
16	3,774	24	24	24	24	23	23	24	24	50	1200	0	50	0	0	45	0	50	50			272	242		0.13	280	246	7.9	7.3	7.4	244	288	270	0.19	260		
17	3,983	24	23	23	24	24	24	24	24	70	1000	0	50	0	0	45	0	70	70			270	242		0.13	274	246	7.8	7.3	7.4	240	276	272	0.28	260		
18	3,902	23	24	24	23	24	24	24	24	70	1300	0	50	0	0	47	0	60	60			262	244		0.18	270	248	7.8	7.3	7.4	252	298	290	0.33	260		
19	3,995	24	24	24	24	24	24	23	23	60	1100	0	50	0	0	36	0	60	70			282	258		0.35	284	246	7.9	7.2	7.4	258	294	288	0.42	280		
20	3,983	24	24	24	24	23	23	24	24	60	1200	0	50	0	0	43	0	60	70			280	252		0.08	284	248	7.7	7.3	7.4	260	288	266	0.52	280		
21	3,964	24	23	23	24	24	24	24	24	65	1500	0	50	0	0	43	0	60	60			274	252		0.11	252	254	7.7	7.3	7.3	254	278	282	0.52	280		
22	4,001	23	24	24	23	24	24	24	24	80	1100	0	50	0	0	45	0	70	70			266	260		0.1	270	264	7.7	7.3	7.3	260	270	268	0.57	280		
23	3,985	24	24	24	24	24	24	23	23	50	1300	0	50	0	0	35	0	60	70			266	242		0.14	288	258	7.8	7.2	7.4	258	278	284	0.61	280		
24	3,917	24	24	24	24	24	24	24	24		1300	0	50	0	0	40	0	60	70			246	238		0.1	260	244	7.9	7.4	7.4	242	284	282	0.61	280		
25	3,955	24	24	24	24	23	23	24	24	70	1300	0	50	0	0	44	0	70	70			258	240		0.12	264	262	7.8	7.3	7.4	254	288	292	0.57	280		
26	3,663	24	23	23	24	24	24	24	24	70	1200	0	50	0	0	41	0	60	60			262	246		0.09	264	256	7.8	7	7.3	248	280	262	0.47	260		
27	3,205	23	24	24	23	24	24	24	24	70	1600	0	50	0	0	38	0	90	60			254	244		0.09	260	240	7.7	7.1	7.3	248	268	268	0.23	240		
28	3,221	24	24	24	24	24	24	23	23	60	1200	0	50	0	0	40	0	90	60			266	234		0.14	266	230	7.8	7.1	7.1	246	278	274	0	240		
29	3,364	24	24	24	24	23	23	24	24	60	1200	0	50	0	0	36	0	80	60			262	228		0.12	256	226	7.7	7	7.2	240	276	260	0.28	250		
30	3,919	24	23	23	24	24	24	24	24	60	1400	0	50	0	0	42	0	100	60			260	238		0.09	256	234	7.8	7.1	7.3	238	260	266	0.28	280		
31	4,077	23	24	24	23	24	24	24	24	60	1600	0	50	0	0	44	0	100	60			250	218		0.1	256	234	7.8	7.2	7.3	220	264	260	0.42	280		
TOT	113160	737	737	737	737	737	737	737	737	1895	37900		1550	0		1257		2210	1910			8162	7426		4.04	8202	7540	244	224	227	7448	8674	8386	13.51	8190		
Avg	3650	24	24	24	24	24	24	24	24	61	1223		50.00	0		40.55		71	62			263	240		0	265	243	7.9	7.2	7.3	240.3	280	271	0.436	#####		

Power Costs	\$14,238.96
Labor Costs	\$30,110.25
Chemicals	\$12,489.47
Supplies	\$375.00
Repairs	\$800.00
TOTAL	\$58,013.68

Ave. Rate of Wash (Vert. in/min.)

I hereby certify the above to be correct
to the best of my knowledge.

Ave Wash Period (Minutes)

% Wash Water Used

Signed

Steve Gray

Title

Water Treatment Plant Supervisor

DEQ Form # 630-577A

Revised 9/1/2000

Oper. Cert. No.

B 6824

Cost per thousand Gallons

Ave. Head Loss for Washing

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY OPERATIONAL REPORT
WATER TREATMENT PLANTS

Durant City Utilities Authority
System

PO Box 578
Address

Durant
City

74702
ZIP

Plant: Durant Water Treatment Plant
PWSID: 1010601
Month: March 2017
Population: 19,491

- ☒ Rapid Rate Filter
☐ Slow Sand Filter

No. OF
SAMPLES
% OF TOTAL
SAMPLES

TURBIDITY GREATER THAN 0.5 NTU:	0	0%	◀
TURBIDITY GREATER THAN 0.3 NTU:	0	0%	◀
TURBIDITY GREATER THAN 0.1 NTU:	3	2%	

TOTAL NO. OF TURBIDITY ANALYSES:		186
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HIGHEST TURBIDITY READING

NUMBER OF SAMPLES > 1 NTU

NUMBER OF SAMPLES > 5 NTU

95TH PERCENTILE OF FINISHED WATER TURBIDITY

95TH PERCENTILE OF SETTLED WATER TURBIDITY

CHLORINE RESIDUAL < 1.0 mg/l LEAVING PLANT (# Samples)

INDIVIDUAL FILTER TURBIDITY CHECKLIST

1. IS TURBIDITY FROM EACH INDIVIDUAL FILTER RECORDED EVERY 15 MINUTES?

☒ Yes ☐ No

2. DID ANY SINGLE FILTER EXCEED 2.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?

☒ No, Go to Question 3.

☐ Yes, What date was the filter profile completed?

DID THIS SAME FILTER EXCEED 2.0 NTU IN 2 CONSECUTIVE 15-MIN PERIODS DURING THE LAST MONTH?

☒ No, Go to Question 3.

☐ Yes, Schedule Comprehensive Performance Evaluation (CPE) with DEQ.

3. DID ANY SINGLE FILTER EXCEED 1.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?

☒ No, Go to Question 4.

☐ Yes, What date was the filter profile completed?

DID THIS SAME FILTER EXCEED 1.0 NTU IN 2 CONSECUTIVE 15-MIN PERIODS DURING THE LAST 2 MONTHS?

☐ No, Go to Question 4.

☐ Yes, What date was the filter self-assessment completed?

4. DID ANY SINGLE FILTER EXCEED 0.5 NTU IN 2 CONSECUTIVE 15-MIN PERIODS AT THE END OF 4 HRS OF OPERATION?

☒ No, You are finished with the checklist.

☐ Yes, What date was the filter profile completed?

* IF ANY OF QUESTIONS 2 THROUGH 4 ARE CHECKED "YES", YOU MUST

COMPLETE THE TURBIDITY TRIGGER EVALUATION FORM AND ATTACH TO THIS MOR.

	TURBIDITY									RESIDUAL DISINFECTANT								COMMENTS
DAY	RAW	SET	SET	2400-0400	0400-0800	0800-1200	1200-1600	1600-2000	2000-2400	ENTRY POINT TO DISTRIBUTION						DISTRIBUTION		
										12am	4am	8am	12pm	4pm	8pm	SYSTEM		
1	8.24	2	2.1	0.11	0.04	0.04	0.03	0.03	0.03	2.75	2.84	2.92	2.97	2.79	2.39	1.90	1.34	
2	14.05	2.3	2.9	0.07	0.03	0.03	0.03	0.04	0.03	2.38	2.64	2.73	2.77	2.37	2.23	2.03	2.47	
3	4.21	1.9	2.4	0.03	0.06	0.05	0.04	0.04	0.04	2.34	2.62	2.72	2.80	2.39	2.39	0.62	1.44	
4	3.94	1.3	1.8	0.04	0.07	0.10	0.04	0.04	0.04	2.55	2.67	2.79	3.00	2.85	2.77	2.29	1.58	
5	4.41	2.2	1.2	0.12	0.04	0.03	0.03	0.03	0.03	2.84	2.99	3.05	3.14	3.14	3.00	1.54	2.54	
6	4.49	2.4	1.7	0.09	0.03	0.03	0.03	0.03	0.03	2.98	3.14	3.16	3.17	2.99	2.45	2.10	1.75	
7	13.23	3.2	2.4	0.06	0.04	0.03	0.03	0.03	0.03	2.46	2.68	2.80	2.99	2.91	2.35	2.60	1.78	
8	16.55	2.4	2.8	0.05	0.04	0.03	0.03	0.03	0.03	2.32	2.60	2.77	2.94	2.70	2.29	1.93	1.80	
9	6.05	1.2	2.3	0.07	0.03	0.03	0.03	0.03	0.03	2.31	2.87	2.98	3.10	2.92	2.53	1.93	1.89	
10	7.01	2.1	2.4	0.03	0.03	0.03	0.03	0.03	0.03	2.65	2.63	2.65	2.72	2.53	2.31	0.59	1.93	
11	12.59	2.4	3.5	0.03	0.03	0.06	0.03	0.03	0.03	2.40	2.44	2.48	2.62	2.26	1.87	2.40	2.18	
12	9.07	1.3	2.6	0.04	0.04	0.04	0.03	0.03	0.03	1.90	2.07	2.15	2.31	2.37	2.04	1.84	1.99	
13	4.79	1.4	1.6	0.07	0.03	0.03	0.03	0.03	0.03	1.98	2.19	2.29	2.50	2.56	2.20	1.70	2.00	
14	4.67	2.2	2	0.06	0.03	0.03	0.03	0.03	0.03	2.20	2.36	2.44	2.50	2.59	2.15	1.54	1.85	
15	4.46	1	2.7	0.05	0.04	0.03	0.03	0.03	0.03	2.10	2.37	2.46	2.57	2.53	2.16	1.56	2.09	
16	4.60	1.3	1.9	0.04	0.03	0.03	0.03	0.03	0.03	2.14	2.45	2.52	2.56	2.56	2.40	1.53	2.21	
17	7.11	1.4	1.7	0.03	0.06	0.03	0.03	0.03	0.03	2.45	2.65	2.69	2.82	2.65	2.27	1.29	2.39	
18	12.56	3.1	3.2	0.03	0.04	0.05	0.03	0.03	0.03	2.33	2.49	2.56	2.68	2.50	2.10	2.42	1.99	
19	14.34	2.3	2.8	0.05	0.04	0.04	0.03	0.03	0.03	2.14	2.41	2.46	2.47	2.37	2.02	2.03	2.14	
20	13.38	1.9	2.2	0.04	0.04	0.03	0.03	0.03	0.03	2.01	2.23	2.30	2.36	2.19	1.96	2.00	1.96	
21	13.62	1.6	2.2	0.05	0.03	0.03	0.03	0.03	0.03	1.97	2.18	2.24	2.28	2.13	1.89	1.70	1.88	
22	12.19	1.5	2.3	0.05	0.03	0.03	0.06	0.03	0.03	1.92	2.19	2.19	2.26	2.12	1.96	1.73	1.97	
23	12.48	1.4	2	0.04	0.04	0.03	0.03	0.03	0.03	1.97	2.18	2.16	2.17	1.98	1.83	1.55	1.78	
24	12.73	2.4	2.2	0.03	0.03	0.03	0.03	0.03	0.03	2.12	2.02	2.14	2.25	2.04	1.89	1.53	1.71	
25	10.15	1.9	2.2	0.03	0.05	0.05	0.03	0.03	0.03	1.98	2.09	2.14	2.29	2.18	1.91	1.95	1.80	
26	10.13	1.6	2.6	0.08	0.03	0.03	0.03	0.03	0.03	1.92	2.12	2.14	2.20	2.21	1.97	1.46	1.61	
27	8.34	1.3	2.2	0.07	0.03	0.03	0.03	0.03	0.03	1.95	2.02	2.09	2.23	2.34	2.19	1.44	1.81	
28	11.42	1.8	2.8	0.04	0.04	0.03	0.03	0.03	0.03	2.12	2.33	2.42	2.71	2.76	2.36	1.70	1.57	
29	12.66	1.4	2	0.04	0.03	0.03	0.03	0.03	0.03	2.28	2.52	2.53	2.51	2.10	1.92	1.75	1.60	
30	14.80	1.6	2.4	0.03	0.09	0.04	0.03	0.03	0.03	2.11	2.26	2.19	2.36	2.15	2.03	1.83	1.58	
31	20.71	1.4	2.3	0.03	0.08	0.04	0.04	0.04	0.03	2.16	2.47	2.61	2.65	2.37	2.00	1.89	1.60	



CHLORINE DIOXIDE AND CHLORITE MONITORING AND REPORTING FORM

1. Public Water System (PWS) Information:

PWSID: OK 1010601

PWS Name: City of Durant

2. Compliance Information:

Water System Facility ID: 1010601

Plant Name: Durant Water Plant

Month: March Year: 2017

3. Analytical Results & Summary Information:

Entry Point Monitoring			<u>Chlorine Dioxide Daily Monitoring (Summary Type: CLO2)</u>					
Day	ClO ₂ (mg/L)	Chlorite (mg/L)						
1	0.14	0.61	Number of Samples Required:					
2	0.11	0.52	Number of Samples Collected:					
3	0.1	0.47	Was All Chlorine Dioxide Monitoring & Reporting Completed? Yes / No					
4	0.08	0.47	Number of ClO ₂ samples exceeded the MRDL of 0.8 mg/L?					
5	0.14	0.52	If a routine sample exceeds the MRDL, the system is required to take (3) three more samples the next day.					
6	0.22	0.61	<u>Chlorite Daily Monitoring (Summary Type: CLO2)</u>					
7	0.07	0.57	Number of Samples Required:					
8	0.15	0.52	Number of Samples Collected:					
9	0.15	0.52	Was All Chlorite Monitoring & Reporting Completed? Yes / No					
10	0.13	0.47	Number of Chlorite samples exceeded the MCL of 1.0 mg/L?					
11	0.16	0.42	If a routine sample exceeds the MCL, the system is required to take (3) three more samples the next day.					
12	0.17	0.52	* If you didn't use Chlorine Dioxide for disinfection any day this month, please mark "n/a" in that day's box to prevent a Monitoring violation.					
13	0.12	0.38						
14	0.12	0.33						
15	0.11	0.28	<u>Routine Chlorite Monthly Monitoring in Distribution System</u>					
16	0.13	0.19	Sampling Location	Lab Sample ID	Sampling Point ID	Collection Date	Certified Lab ID	Chlorite (mg/L)
17	0.13	0.28	Near 1st Customer					
18	0.18	0.33	Avg. Residence Time					
19	0.35	0.42	Max. Residence Time					
20	0.08	0.52	Monitoring Period Average:					
21	0.11	0.52	Mark (X) if analytical results were reported electronically: _____					
22	0.1	0.57	- If the arithmetic average of any three sample set exceeds the Chlorite MCL (1.0 mg/L), the system is in violation of the MCL.					
23	0.14	0.61	- If more than one three-sample set was collected, attach additional copies of this form.					
24	0.1	0.61						
25	0.12	0.57						
26	0.09	0.47						
27	0.09	0.23						
28	0.14	0						
29	0.12	0.28						
30	0.09	0.28						
31	0.1	0.42						

Signature of owner or operator: _____

Date: _____

Operator License Number _____

Send all documents to:

Joe Keeble
Disinfection Byproducts Compliance Coordinator
Water Quality Division, DEQ
P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

DEQ Form # 630-577D
Revision 06/01/2009



THE CITY OF DURANT

Office of the Water Treatment Plant

Water Treatment Plant Projects Schedule March 2017 Monthly Report

A. Work Completed

1. Calibrate lab instruments daily
2. Maintained Water Plant
3. Cleaned all buildings weekly
4. Backwashed filters as needed
5. Backwashed raw pumps weekly
6. Hooked up chlorine tanks and checked for leaks
7. Unload chemicals as they arrived
8. Pulled sludge as needed
9. Run daily chlorine dioxide samples on raw line
10. Flushed alum pumps
11. Inspected fire extinguishers
12. Pulled required water samples and send to ODEQ
13. Clean turbidity meters as needed
14. Cleaned screens on CLO2 generator as needed
15. Worked at the lagoons
16. Did tour of the plant for reporter from The Washington Post
17. Replaced battery backup on #6 filter console
18. Worked on #4 air scour valve
19. Loaded irrigation pipe and old brush hog and took to public works for auction
20. Fixed hydraulic line on back hoe
21. Mowed Plant grounds
22. Weed eaten around plant grounds
23. Gave a tour of the Plant to a photographer of the Washington Post
24. Replaced wind sock up by cl2 room

B. Work Planned for January-December

1. Pull #2 yard pump
2. Get Osec Running
3. Get fence fixed at Chuckwa Tower

Approx Start/Finish Date

Time permitting
Time permitting
Time permitting

C. Projects Planned and Requested for Authorization

- A. Fencing around Cardinal Glass Tower
- B. Replace altitude valves at 3 towers in town



The City of Durant

Solid Waste Landfill

Memorandum

Date: 3/30/2017
To: Utilities Authority
From: Zefe Laborico, Supervisor, Solid Waste
Landfill
Re: Landfill Information & Reports - March 2017

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
March 2017 DEQ Reports	Cover Memo	4/3/2017
March 2017 Project schedule	Cover Memo	4/3/2017
Progress on Multi-use building 1	Cover Memo	4/3/2017
Progress on Multi-use building 2	Cover Memo	4/3/2017
Progress on Multi-use building 3	Cover Memo	4/3/2017
Progress on Multi-use building 4	Cover Memo	4/3/2017
Progress on Multi-use building 5	Cover Memo	4/3/2017
Noel Gardner Maintaining Landfill grounds	Cover Memo	4/3/2017



MONTHLY REPORT FOR SOLID WASTE DISPOSAL FACILITIES

(Please see instructions prior to completing this form)

Due by the 10th of the month following the reporting month

Administrative Services
Accounts Receivable
P. O. Box 2036
Oklahoma City, OK 73101-2036

Report month/year: MARCH 2017

Facility Name: CITY OF DURANT C/D LANDFILL
Mailing Address: PO BOX 578
DURANT, OK 74702-0578

Permit Number: 3507001

Phone Number: 580-931-6606

Total # of Days open: 27

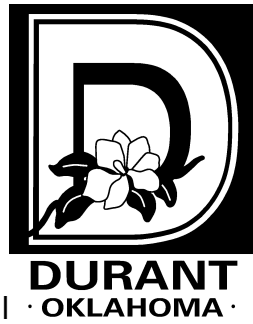
COMPLETE SECTIONS 5-10 ONLY IF SCALES GO DOWN

D A Y	(1) Total weight accepted (tons)	(2) Weight which is reused or recycled in accordance with facility permit (tons)	(3) Weight accepted from a DEQ approved emergency or special event (tons)	(4) Weight accepted from large industrial waste generators with DEQ exemption certificate (tons)	(5) Time scales placed out of service	(6) Time scales placed into service	(7) Total volume accepted (yd3)	(8) Volume which is reused or recycled in accordance with facility permit (yd3)	(9) Volume accepted from a DEQ approved emergency or special event (yd3)	(10) Volume accepted from large industrial waste generators with DEQ exemption certificate (yd3)
1	54.25									
2	103.96									
3	80.4									
4	14.84									
5	0									
6	74.91									
7	13.94									
8	98.88									
9	90.58									
10	57.93									
11	36.52									
12	0									
13	34.09									
14	99.22									
15	119.42									
16	120.96									
17	105.12									
18	36.64									
19	0									
20	100.33									
21	88.02									
22	71.03									
23	100.16									
24	38.51									
25	6.49									
26	0									
27	7.06									
28	38.64									
29	20.05									
30	47.07									
31	83.89									
Total	1742.91	0	0	0	0	0	0	0	0	0

I hereby certify that the information reported above is accurate and correct to the best of my knowledge and includes all solid waste received at this facility.

Signature of authorized agent: [Signature] Phone #: 580-924-8358

Date: 4-3-17



THE CITY OF DURANT

Office of the Solid Waste Superintendent

SOLID WASTE DISPOSAL PROJECTS SCHEDULE ***March 2017***

A. Work Completed for March:

1. Covered C & D Site
2. Hauled MSW To SORD
3. Worked on Multi-use building

B. Work Planned For April:

1. Continue Covering C&D site
2. Have new C&D cell 10C inspected and approved
3. Haul MSW To SORD
4. Continue working on multi-use building

C. Work Planned For Jan. '17 – Dec. '17:

Approx. Start – Finish Date:

1. Haul trash to Ardmore 1-2017 thru 12-2017

D. Projects Planned And Requested For Authorization:

1. None.















The City of Durant

Office of the Wastewater Treatment Plant

Memorandum

Date: 4/2/2017
To: Utilities Authority
From: Terry Condor, Waste Water Treatment Plant
Superintendent
Re: Waste Water Treatment Plant Monthly Report - March
2017

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
WWTP MARCH REPORT 2017	Cover Memo	4/3/2017



The City of Durant

Office of the Wastewater Treatment Plant

PROJECTS SCHEDULE

A: WORK COMPLETED IN

- 1: MONITORING OF SBR SE VALVES TO DETERMINE FURTHER FAILURES (on going)
- 2: CLEAN CLARIFIER WEIRS 3-30-17
- 3: CLEAN BLEND TANK MIXER 3-29-17
- 4: CLEAN EFFLUENT PUMP STATION
- 5: CLEAN RAW WATER PUMP STATION
- 6: CLEAN SCUM PUMP STATION 3-10-17
- 7: CLEAN DRAIN LIFT STATION
- 8: CK TORQUE & OVERLOAD & GREASE CHAIN ON CLARIFIER 3-3-17
- 9: CALIBRATE DISCHARGE DO & PH METER 3-24-17
- 10: CHECK CALIBRATION OF DISCHARGE FLOW METER 3-29-17
- 11: RESET SBR PLC (not needed)
- 12: WASH DOWN STEP SCREEN 3-17-17
- 13: CLEAN UV TROUGHS AND FLUME 3-16-17
- 14: CHECK ELECTRIC MANHOLES 3-30-17
- 15: CLEAN OUT BUILDINGS 3-23-17
- 16: MANUALLY CHECK U.V. BULBS 3-13-17
- 17: WASH DOWN CASINO STEPSCREEN 3-6-17
- 18: CHECK ALL AUTOMATIC VALVES 3-1-17—3-31-17
- 19: VEHICLE INSPECTION 3-6-17
- 20: WALK-THRU INSPECTION 3-6-17
- 21: CLEAN ALL PLC's 3-24-17
- 22: CLEAN D.O. METERS 3-7-17
- 23: CHECK CLARIFIER OIL WEEKLY 3-6-17, 3-16-17
- 24: 5 CALL OUTS AFTER HOURS
- 25: ADDED SLUDGEMEISTER TO ALL SBR'S

TREATED 57.741 MG OF WASTEWATER
PROCESSED 55.460 KG OF TREATED SLUDGE

B: WORK PLANNED FOR

- 1: MONITORING OF SBR SE VALVES TO DETERMINE FURTHER FAILURES (on going)
- 2: CLEAN CLARIFIER WEIRS
- 3: CLEAN BLEND TANK MIXER
- 4: CLEAN EFFLUENT PUMP STATION
- 5: CLEAN RAW WATER PUMP STATION
- 6: CLEAN SCUM PUMP STATION
- 7: CLEAN DRAIN LIFT STATION
- 8: CK TORQUE & OVERLOAD & GREASE CHAIN ON CLARIFIER
- 9: CALIBRATE DISCHARGE DO & PH METER
- 10: CHECK CALIBRATION OF DISCHARGE FLOW METER
- 11: RESET SBR PLC
- 12: WASH DOWN STEP SCREEN
- 13: CLEAN UV TROUGHS AND FLUME
- 14: CHECK ELECTRIC MANHOLES
- 15: CLEAN OUT BUILDINGS
- 16: MANUALLY CHECK U.V. BULBS
- 17: WASH DOWN CASINO STEPSCREEN
- 18: CHECK ALL AUTOMATIC VALVES
- 19: VEHICLE INSPECTION
- 20: WALK-THRU INSPECTION
- 21: CLEAN ALL PLC's
- 22: CLEAN D.O. METERS
- 23: CHECK CLARIFIER OIL WEEKLY



The City of Durant

Office of the Wastewater Treatment Plant

Memorandum

Date: 4/3/2017
To: Utilities Authority
From: Waste Water Treatment Plant Lab
Re: Waste Water Treatment Plant Lab Monthly Report - March 2017

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
WWTP Lab March	Cover Memo	4/3/2017



THE CITY OF DURANT

Office of the Wastewater Treatment Plant

Lab Report

Lab Tests Processed

<u>93</u>	Bac-t's
<u>84</u>	BOD's
<u>20</u>	TSS's
<u>14</u>	NH3's
<u>0</u>	DO's
<u>0</u>	Ph's
<u>0</u>	Fecal Coliforms (May 1 st – Sept. 30 th)
<u>0</u>	FOG's

Work Projects

- Data entry
- Reports (water test results), Make copies and envelope
- Purchase Orders, copy, file
- Equipment calibrations and maintenance
- Sampling and process readings
- Quality Assurance, Quality Control tests
- Laboratory Testing
- Filing
- Daily/Weekly laboratory and WWTP building cleaning
- Monthly, Quarterly, Bi-annual, Yearly reports
- Ordering Lab chemicals and supplies
- Water Billing
- Storm water monitoring
- Pretreatment

Durant Wastewater Influent & Effluent Results

Date Tested: 3/1/17

BOD INFLUENT (RAW) - 82.3 mg/L

TSS INF. (RAW) - 80 mg/L

AMMONIA NITROGEN INF. (RAW) - 39.8 mg/L

CBOD EFFLUENT (FINISH) - 3.6 mg/L
TSS EFF. (FINISH) - 7.4 mg/L
AMMONIA NITROGEN EFF. (FINISH) - 1.4 mg/L
FECAL COLIFORM EFF. (FINISH) - 0 & 0 CFU/100ml (May 1st – Sept. 30th)

Date Tested: 3/8/17

BOD INFLUENT (RAW) - 91 mg/L
TSS INF. (RAW) - 112 mg/L
AMMONIA NITROGEN INF. (RAW) - 40.7 mg/L
CBOD EFFLUENT (FINISH) - 2.8 mg/L
TSS EFF. (FINISH) - 6 mg/L
AMMONIA NITROGEN EFF. (FINISH) - 0.8 mg/L
FECAL COLIFORM EFF. (FINISH) - 0 & 0 CFU/100ml (May 1st – Sept. 30th)

Date Tested: 3/15/17

BOD INFLUENT (RAW) - 88.4 mg/L
TSS INF. (RAW) - 104 mg/L
AMMONIA NITROGEN INF. (RAW) - 37.4 mg/L
CBOD EFFLUENT (FINISH) - 4.1 mg/L
TSS EFF. (FINISH) - 2.6 mg/L
AMMONIA NITROGEN EFF. (FINISH) - 0.2 mg/L
FECAL COLIFORM EFF. (FINISH) - 0 & 0 CFU/100ml (May 1st – Sept. 30th)

Date Tested: 3/22/17

BOD INFLUENT (RAW) - 101 mg/L
TSS INF. (RAW) - 100 mg/L
AMMONIA NITROGEN INF. (RAW) - 29.8 mg/L
CBOD EFFLUENT (FINISH) - 2.4 mg/L
TSS EFF. (FINISH) - 3.7 mg/L
AMMONIA NITROGEN EFF. (FINISH) - 0.3 mg/L
FECAL COLIFORM EFF. (FINISH) - 0 & 0 CFU/100ml (May 1st – Sept. 30th)



The City of Durant

Utility Office

Memorandum

Date: 4/5/2017
To: Utilities Authority
From: Kelly Hawthorne, Utility Billing Supervisor
Re: Durant City Utility Authority Monthly Reports - February and March 2017

Durant City Utility Authority Monthly Reports for February 2017 and March 2017

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
DCUA February 2017 Monthly Report	Cover Memo	4/5/2017
DCUA March 2017 Monthly Report	Cover Memo	4/5/2017



Monthly Utility Billing,
Cash Collection,
And Consumption Summary

February 2017

	WATER		SANITARY SEWER		SANITATION	
	Month	YTD	Month	YTD	Month	YTD
Number of Bills - Active Accounts	5959		5844		6143	
Total Revenue Billed	\$304,071.24	\$2,589,527.71	\$209,477.33	\$1,873,098.25	\$363,171.46	\$2,867,312.62
Amount of Penalties	\$7,547.76	\$61,920.62				
Adjustments in Dollar	(\$13,410.56)	(\$150,313.54)	(\$20,610.19)	(\$164,217.18)	(\$8,570.55)	(\$48,154.62)
TOTAL CASH RECEIPTS	\$196,648.70	\$2,125,224.00	\$187,833.77	\$1,474,683.40	\$328,008.18	\$2,217,972.10
CONSUMPTION IN GALLONS					81,777,600	

Additional Utility Office Information

2/1 thru 2/28

New Service Applications	28
Service Order Issued for Water/Sewer	535
Service Order Issued for Solid Waste	216
Number of Walk In/Phone Payments	3264
Mail Payments	1291
Web Payments	662
Drop Box Payments	468
Bank Draft Payments	696
Credit Card Draft Payments	169
Other Payments *****	291

***** (Includes Tap Fees, Departmental Revenues, Accounts Receivable, Licenses and Permits)



Monthly Utility Billing,
Cash Collection,
And Consumption Summary

March 2017

	WATER		SANITARY SEWER		SANITATION	
	Month	YTD	Month	YTD	Month	YTD
Number of Bills - Active Accounts	5984		5879		6162	

Total Revenue Billed	\$243,079.47	\$2,832,607.18	\$187,279.70	\$2,060,377.95	\$358,744.16	\$3,226,056.78
Amount of Penalties	\$6,468.81	\$68,407.43				

Adjustments in Dollar	(\$9,789.93)	(\$160,103.47)	(\$17,038.13)	(\$181,285.31)	(\$5,960.25)	(\$54,114.87)
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TOTAL CASH RECEIPTS	\$218,202.99	\$2,343,426.99	\$219,112.56	\$1,688,595.96	\$352,078.74	\$2,570,050.84
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CONSUMPTION IN GALLONS	59,736,400
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Additional Utility Office Information

3/1 thru 3/31

New Service Applications	73
Service Order Issued for Water/Sewer	567
Service Order Issued for Solid Waste	233
Number of Walk In/Phone Payments	3758
Mail Payments	1444
Web Payments	809
Drop Box Payments	412
Bank Draft Payments	695
Credit Card Draft Payments	171
Other Payments *****	409

***** (Includes Tap Fees, Departmental Revenues, Accounts Receivable, Licenses and Permits)



The City of Durant

Office of City Clerk

Memorandum

Date: 4/10/2017
To: Utilities Authority
From: Jacque Wilson, Deputy City Manager of Operations
Re: Consider Approval of Request for Authorization to Purchase for Water Leak Detection Study (RFAP# 2017-051)

Council Information / Action Requested

Approve Request for Authorization to Purchase for Water Leak Detection Study (RFAP# 2017-051) in the amount of \$49,980.00.

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
RFAP #2017-051	Exhibit	4/10/2017

Spend & Contract Form

F27122015

SPEND/CNTRCT#
INCODE PROJ#
RFAP#**REQUEST FOR AUTHORIZATION TO PURCHASE**

Ref: 11 O.S. §10:114 (B) and 61 O.S. §103 (D) and City of Durant Code: § 37.003-37.010

Item #

- 1 Item planned for spending (provide details):
Water Leak Detection Study. To help find leaks on approximately 70% of the City's 133 miles of waterlines.
- 2 Department requesting authorization:
DCM of Operations
- 3 Bidding recommendation (award or reject along with name and contact information of vendor):
Wall Engineering
- 4 Estimated Purchase Date (M/D/Y): *June 1, 2017*
- 5 What are the financing or lease purchase terms (APR %, length of financing, payments, etc.)
- 6 Is this item included in the current FY budget (Yes/No)
- 7 GL account code:
GL # 405-026-551-50-80
- 8 Spending / purchase request details (complete below blanks):
 - 8a Amount requested to spend *\$49,980.00*
 - 8b Item (new or replacement, if a capital item complete fixed asset form)?
 - 8c Old item to be Traded-In (Yes / No). Note: If a capital item complete fixed asset form?
- If a Replacement Item, give description, age and condition of item to be replaced (including model & serial or VIN, trade allowance)*
- 8d Is a contractor written agreement involved (Yes / No), if yes include a copy of the contract after City Attorney Review
- 8e Does the purchase involve Grant Funding (Yes or No)
- 8f What is the City Cash Match for the Grant
- 8g What other match or financial obligation is involved with the City accepting this Grant (explain with details)
- 9 Purchase is Planned By (complete appropriate item(s) below):
 - 9a Informal Quotes – Purchases of \$2000-\$15,000 City Manager approval required. Purchases with an estimated cost over \$15,000 use formal bids. Specifications & at least 3 quotes must be attached for items over \$5,000 (city manager can require quotes for below \$5,000):
blank
 - 9b Formal Bids -- Purchases with an estimated cost over \$15,000 Council approval required. Attach complete specifications and a bidders list with at least 3 bidders. Include bidder name, address, phone number, fax number and email address of recommended vendor:
blank
 - 9c State Contract – Purchases of \$2,000-\$15,000 City Manager approval required. Purchases over \$15,000 Council approval required. Include name, address, phone number, fax number, email address of state contract vendor and state contract number:
blank

Spend & Contract Form

- 9d **Buy Board** – Purchases of \$2,000-\$15,000 City Manager approval required. Purchases more than \$15,000 Council approval required. Include name, address, phone number, fax number, email address of Buy Board:

blank

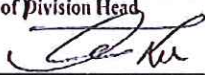
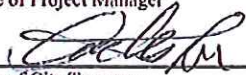
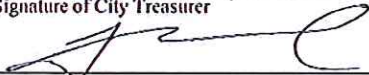
- 9e **Professional Services Agreement** – Purchases over \$2,000 and less than \$15,000 via an engineering, surveying, architect, computer services, janitorial, etc. firm covered by a council approved professional services agreement, City Manager approval required.

Required to stem current operational lost in for WTP production. Estimated reduction in cost could be upto \$200K/yr

- 9f **Emergency Purchase** – To be utilized only when immediate action must be taken to protect the public health or safety or to prevent damage to property, prior council approval not required. Notify the City Manager immediately that an emergency purchase is needed.

- 9g **Sole Source Purchase** – Purchases of \$2,000-\$15,000 City Manager approval required. Purchases with an estimated cost over \$15,000 Council approval required in addition to City Manager approval. Attach to this request a memo detailing the nature of the Sole source designation, that is explain how this purchase fulfills the requirements to be considered a sole source purchase:

- 10 **Signature & date blocks (complete appropriate sections):**

10a	Signature of Grants Administrator (if applicable)	date (M/D/Y):
	N/A	
10b	Signature Department Head	date (M/D/Y):
		April 5, 2017
10c	Signature of Division Head	date (M/D/Y):
		4-05-2017
10d	Signature of Budget Administrator	date (M/D/Y):
10e	Signature of Project Manager	date (M/D/Y):
		4-05-2017
10f	Signature of City Treasurer	date (M/D/Y):
		4-5-17
10g	Signature of City Manager (only over \$2,000)	date (M/D/Y):

- 11h **City Manager Comments:**



The City of Durant

Deputy City Manager of Operations

Memorandum

Date: 4/4/2017
To: Utilities Authority
From: Jacque J. Wilson, Deputy City Manager of Operations
Re: Consider Approval of Leak Detection Study with Wall Engineering (Work Order #DU-17-02) (C-2017-16)

Request for Approval of Leak Detection Study with Wall Engineering. This study will consist of acoustic line monitoring to identify water leaks through out the City's 130+ miles of water lines. The City will provide in-kind labor with the placement of leak detection devices. It is estimated that the City is spending an extra \$200K in operational cost due to an inability to account for production water losses.

Additionally, Community Development will work jointly with M&O to simultaneously perform GPS mapping of our existing lines to greatly improve the accuracy and reliability of our digital maps.

Council Information / Action Requested

Approve Leak Detection Study with Wall Engineering

City Staff Information / Action Follow-up, if Council authorizes this action:

City Clerk to provide signed document to Deputy City Manager of Operations for execution of the study.

ATTACHMENTS:

Description	Type	Upload Date
Work Order DU-17-02 Leak Detection	Cover Memo	4/5/2017

WORK ORDER FOR PROFESSIONAL SERVICES

CITY OF DURANT

WORK ORDER NUMBER DU-17-02

WATER LEAK DETECTION STUDY

This will constitute authorization by the CITY OF DURANT (Owner) for WALL ENGINEERING, LLC (Engineer) to proceed with the outlined scope of services as described and in accordance with the previously executed "Work Order Agreement for Engineering Services."

PROJECT: WATER LEAK DETECTION STUDY

- Participate in meetings with the Owner's representatives to discuss and define project requirements. Train Owner's staff on equipment deployment techniques.
- Approximately 70% of Owner's facilities will be studied in the scope of this Work Order and it shall be the Owner's responsibility to define the study area.
- Engineer to prepare maps of sites to be monitored in each deployment of listening equipment. 51 sites will be monitored per deployment equating to approximately 17,500' of watermain per deployment.
- Owner's staff will deploy leak detection listening devices on fire hydrants, valves, meters & miscellaneous components as directed by weekly maps provided by Engineer.
- Leak detection equipment to remain in place over a two (2) night period to allow for leaks to be comparatively analyzed.
- Owner's staff to remove monitoring equipment
- Engineer will download data and prepare equipment for next deployment.
- Engineer will use frequency analysis software to analyze data for leak sounds present during the nighttime listening periods.
- With Owner's staff present, the Engineer will pinpoint the individual leaks heard during the overnight listening periods with computerized leak correlation equipment and digital ground microphones. Approximate location of leaks will be

marked on the nearest hard surface with paint. GPS coordinates will be provided if desired.

- Upon completion of leak detection survey, a leak report will be prepared detailing all leaks outlined. Report will provide an outline of estimated severity of each leak and a confidence level in the location.
- Owner's staff will be responsible for all leak repairs. During repair, additional leak correlations may be performed by Engineer at Owner's request.

For performing the services described, the Engineer is to be paid a lump sum amount of of \$49,980.00 invoiced at a rate of \$1,785 per deployment of equipment. Engineer will invoice monthly based on number of deployments in billing period.

Summary of Cost

Deployments:	28
Cost per Deployment:	\$1,785
Total Cost:	\$49,980.00

Feet of Pipe Analyzed

Deployments:	28
Feet of Pipe per Deployment:	17,500
Total Pipe Included in Study:	500,000' (95 miles)
% of System:	70% (95 miles / 136 miles)

Time of Completion

16 weeks (based on 2 deployments per week and 2 weeks to compile the final report).
Time of completion assumes availability of Owner's staff for scheduled deployments.

APPROVED:

CITY OF DURANT

By: _____
Mayor

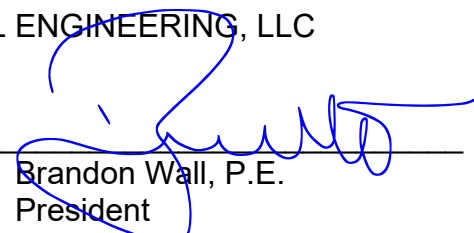
ATTEST:

Clerk

Date: _____

ACCEPTED:

WALL ENGINEERING, LLC

By: 
Brandon Wall, P.E.
President

Date: _____ 04/11/17