



Wednesday, October 10, 2018

Roshini Schroeder, EPS VI
Municipal Pretreatment Coordinator
Oklahoma Department of Environmental Quality
Municipal Wastewater Field Inspection/Enforcement Section
Water Quality Division
707 N. Robinson
Oklahoma City, OK 73102

Re: FY 2018 Pretreatment Annual Report to the DEQ
City of Broken Arrow Industrial Pretreatment Program
Lynn Lane Wastewater Treatment Plant
Oklahoma Pollutant Discharge Elimination System
(OPDES) Permit Number OK0040053

Dear Mrs. Schroeder:

The City of Broken Arrow Industrial Pretreatment Program Annual Report for the period October 1, 2017 through September 30, 2018 is hereby submitted. Please note the following overall general comments in addition to the required forms:

Report of Changes to the Approved Pretreatment Program

There have been no changes made or requested to the current City of Broken Arrow/ Lynn Lane Wastewater Treatment Plant (WWTP) Approved Industrial Pretreatment Program.

A technically based local limit study is in progress and will be submitted to DEQ by May 31, 2019. I have attached our sampling plan for you to review in Section 7: Water Quality Based Effluent Concentrations.

Industrial User (IU) Wastewater Survey

The IU Wastewater Survey is continually updated in Broken Arrow. All new non-residential utility customers are given a one-page short survey to fill out before they can obtain water service. The surveys are then forwarded to the pretreatment office. A comprehensive IU Survey is performed every 5 years and will be performed next in 2022.

Report on Pass Through, Upset and/or Interference

Regarding Influent and Effluent priority pollutant scans, all parameters were below both maximum allowable headworks loadings (MAHL) and Oklahoma Water Quality Criteria.

There have been no instances of pass through, upset or interference resulting in OPDES permit violations known or suspected to have been caused by industrial users at any of the POTW covered under the City of Broken Arrow Industrial Pretreatment Program.

Report on Other Administrative Activities

During the 2017-2018 pretreatment year no Industrial Users were significantly non-compliant (SNC).

The City of Broken Arrow issued Blue Bell Creameries a Consent Order on January 23, 2017 which is still in effect. Blue Bell has met all of the milestones to date, a payment of \$1,000 was



received on January 4, 2018, as required in the Order. Surcharges have been suspended for the duration of the Order. A pilot study was done by Blue Bell, in January 2018, to test equipment similar in design to the pretreatment system which will be constructed. The study revealed that a Dissolved Air Flootation (DAF) system will significantly reduce biochemical oxygen demand, total suspended solids, and oil and grease wastewater discharge from Blue Bell. Construction of the pretreatment system” is underway. A status report is available for your review in Section 6 of the annual report.

Operations at Broken Arrow Powder Coating (Location 1) were halted effective February 9, 2018. Broken Arrow Powder Coating submitted a permit application for this site in hopes that they will generate enough business to re-open the location in the future. The permit was renewed on June 1, 2018. The City of Broken Arrow did not perform an inspection or control authority sample at Location 1.

Mullin Plumbing was permitted by City of Broken Arrow on September 1, 2018, to operate a residential septic system dewatering station. The station consists of a series of 6 holding tanks with baffles for solids separation. Mullin Plumbing is required to sample 4 days per month for BOD/TSS, Oil & Grease, Metals, and Cyanide. Initial sampling was performed by Mullin Plumbing September 24-27, 2018. Monitoring reports are due on or before the 15th of the month following each sample, and must include:

- Manifest for each truck load
- pH of each truck load
- Daily flow reading
- Laboratory analysis and chain-of-custody

Training

City of Broken Arrow Pretreatment staff attended the following training between October 1, 2017 and September 30, 2018:

- OSU College of Engineering Architecture and Technology – Environmental Management – 80 hours
- Oklahoma DEQ - Oklahoma Environmental Law Enforcement Training- 8 hours
- EPA Region VI Pretreatment Association Workshop – 15 hours

Pollution Prevention

The City of Broken Arrow places a high value on pollution prevention. Please read the following list of activities for FY 2018:

- City of Broken Arrow conducts commercial inspections 3 days per week. Food handling establishments are inspected twice per year and the automotive shops and car washes once per year. The inspector checks grease/sand interceptors and oil/water separators for proper maintenance, looks at maintenance manifests, speaks with management about best management practices, and inspects waste oil recycle areas.
- Broken Arrow MET Recycle Center yearly totals: Antifreeze recycled = 860 gal; Cooking oil recycled = 998 gal; Motor oil recycled = 8,450 gal
- City of Broken Arrow cooking oil recycle station (located @ Reasor's) yearly total = 626 gal



- City Pretreatment staff participated in the 2018 Mayor's Challenge for Water Conservation which lasted the whole month of April. Mayor Thurmond joined mayors across the nation in asking residents to be more water-wise by making a pledge to change daily habits and perform easy tasks at home to save money, conserve water and energy, and promote water quality in local watersheds. Pretreatment staff visited 35 private schools and daycare centers and spoke to management about the impact that water conservation has on water quality. Earth Day activity books were distributed for each student. Staff also set up a booth at the Farmer's Market and visited local charities, technical schools and universities handing out water quality brochures and 5-minute shower timers. The challenge was a wonderful opportunity for Pretreatment staff to speak to the public about water quality and pollution prevention in the home. Broken Arrow did an outstanding job in the challenge, coming in 18th out of more than 1000 cities in our population category.

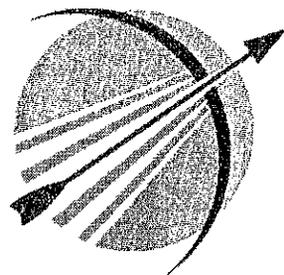
This concludes the summary; the annual report is attached. Thank you for your continued support. If you have any questions, please contact me at (918) 259-7000 ext. 7220 lwilson@brokenarrowok.gov.

Sincerely,

Lauren Wilson
Pretreatment Coordinator
City of Broken Arrow

cc: Michael Spurgeon, City Manager
Kenneth Schwab, Assistant City Manager of Operations
Charles Vokes, Utilities Director
David Handy, Lynn Lane Wastewater Treatment Plant Manager

ANNUAL REPORT TO THE
OKLAHOMA DEPARTMENT OF
ENVIRONMENTAL QUALITY



BROKEN ARROW

Where opportunity lives

INDUSTRIAL PRETREATMENT PROGRAM FOR: THE CITY OF BROKEN
ARROW, OKLAHOMA LYNN LANE WASTEWATER TREATMENT PLANT

NPDES PERMIT NUMBER OK 0040053

OCTOBER 1, 2017 THROUGH SEPTEMBER 30, 2018



BROKEN ARROW

Where opportunity lives

THE CITY OF BROKEN ARROW
LYNN LANE WASTEWATER TREATMENT PLANT
INDUSTRIAL PRETREATMENT PROGRAM

CERTIFICATION STATEMENT

"I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

The City of Broken Arrow
Control Authority

Oct. 1, 2017 to Sep. 30, 2018
Report Date

Charles Vokes
Name of Responsible Official

Utilities Director
Title


Signature

SECTION 1:

PRETREATMENT PERFORMANCE SUMMARY

PRETREATMENT PERFORMANCE SUMMARY (PPS)

Page 1 of 2

I. General Information

City of Broken Arrow, Lynn Lane Wastewater Treatment Plant

Control Authority Name

485 N. Poplar Ave.

Address

Broken Arrow, OK 74012

City, State, Zip

Lauren Wilson, Pretreatment Coordinator, City of Broken Arrow

Contact Person, Position

(918) 259-7000 Ext. 7220

(Area Code)

Contact Telephone

OK0040053

OPDES Permit Number(s)

Begin Date: 10/1/17

Reporting Period

End Date: 9/30/18

II. Significant Industrial User Compliance

<u>Record the Number of SIU Who:</u>		<u>SIGNIFICANT INDUSTRIAL USERS</u>	
		<u>Categorical</u>	<u>Non-categorical</u>
1.	a. Submitted a BMR	<u>0</u>	N/A
	b. Were Required to Submit a BMR	<u>0</u>	N/A
2.	a. Submitted a 90-Day Compliance Report	<u>0</u>	N/A
	b. Were Required to Submit a 90-Day Report	<u>0</u>	N/A
3.	a. Submitted Required Self-Monitoring Reports	<u>3</u>	<u>3</u>
	b. Were Required to Submit Self-Monitoring Reports	<u>3</u>	<u>3</u>
4.	a. Met a Compliance Schedule	<u>0</u>	<u>0</u>
	b. Were Required to Meet a Compliance Schedule	<u>0</u>	<u>0</u>
5.	a. Were in Significant Noncompliance (SNC)	<u>0</u>	<u>0</u>
<u>Additional Information:</u>			
6.	Total Number of SIU	<u>4</u>	<u>3</u>
7.	Rate of SNC for <u>all</u> SIU (categorical & non-categorical)		<u>0 %</u>

PRETREATMENT PERFORMANCE SUMMARY (PPS)

Page 2 of 2

III. Compliance Monitoring Program

<u>Record the Number of:</u>	<u>SIGNIFICANT INDUSTRIAL USERS</u>	
	<u>Categorical</u>	<u>Non-categorical</u>
1. a. Issued Control Documents	<u>4</u>	<u>3</u>
b. Required Control Documents	<u>4</u>	<u>3</u>
2. a. Facilities Inspected	<u>3</u>	<u>3</u>
b. Inspections Conducted	<u>3</u>	<u>3</u>
3. a. Facilities Sampled	<u>3</u>	<u>3</u>
b. Samplings Conducted	<u>15</u>	<u>99</u>

IV. Enforcement Actions

<u>Record the Number of:</u>	<u>SIGNIFICANT INDUSTRIAL USERS</u>	
	<u>Categorical</u>	<u>Non-categorical</u>
1. a. Compliance Schedules Issued	<u>0</u>	<u>0</u>
b. Compliance Schedules Required	<u>0</u>	<u>0</u>
2. Notices of Violation (NOV) Issued	<u>0</u>	<u>0</u>
3. Administrative Orders (AO) Issued	<u>0</u>	<u>0</u>
4. Civil Suits Filed	<u>0</u>	<u>0</u>
5. Criminal Suits Filed	<u>0</u>	<u>0</u>
6. Significant Violators Published	<u>0</u>	<u>0</u>
7. SIU that were Assessed Penalties	<u>0</u>	<u>1</u>
8. Dollars of Penalties Collected	<u>\$ 0</u>	<u>\$ 1,000</u>
9. Other Actions (sewer bans, etc.)	<u>0</u>	<u>0</u>

SECTION 2:

SIGNIFICANT INDUSTRIAL USERS

PRETREATMENT PROGRAM STATUS REPORT
Updated Significant Industrial User List

SIGNIFICANT INDUSTRIAL USER (SIU) NAME AND ADDRESS	SIC CODE	CATEGORICAL/ NONCATEGORICAL	CONTROL DOCUMENT		ADDED/ DELETED (A, D, N/A)	NUMBER of TIMES SAMPLED		NUMBER of TIMES INSPECTED	COMPLIANCE STATUS (C, NC, SNG, N/A)			EFFLUENT LIMITS
			Y/N	Last Action		City	SIU		BMR	90-Day Compliance	Self- Monitoring	
Republic Services/Broken Arrow Landfill N. 161 E Ave. 1225	4953	NONCATEGORICAL	Y	11/1/2017	N/A	1	4	1	N/A	N/A	C	C
Blue Bell Creameries* 8201 E. HWY 51	2024	NONCATEGORICAL	Y	11/4/2017	N/A	1	89	1	N/A	N/A	C	NC
Russelectric 1215 E. Houston	3471	CATEGORICAL	Y	11/4/2017	N/A	1	4	1	N/A	N/A	C	C
Broken Arrow Powder Coatings ** 809 N. 16th	3479	CATEGORICAL	Y	6/1/2018	N/A	0	0	0	N/A	N/A	N/A	N/A
Flight Safety International 700 N. 9th St.	3471	CATEGORICAL	Y	6/16/2018	N/A	1	4	1	N/A	N/A	C	C
Grav-N-Gasket *** 705 S. 12th St.	7699	NONCATEGORICAL	N						DELETED			
PACCAR Winch 800 E. Dallas St.	3479	CATEGORICAL	Y	08/26/18	N/A	1	4	1	N/A	N/A	C	C
Mullin Plumbing Septic Dewatering Station**** 100 S. 23rd St.	7699	NONCATEGORICAL	Y	9/1/2018	ADDED	0	4	1	N/A	N/A	C	C

Additional Notes:

- *Blue Bell Creameries is under a consent order. Please see the update that is attached Section 3: Non-Compliant Industrial Users and Section 6 Compliance Schedules.
- **Broken Arrow Powder Coating shut down operation at this facility on February 9, 2016. They opted to keep the permit active but did not discharge in the timeframe of October 1, 2017 and September 30, 2018.
- ***Grav-N-Gasket permanently closed business. Process tanks were pumped and hauled off-site on 12/28/17, and the non-discharge permit was closed on 1/4/18. The closure letter is attached for your review.
- ****Mullin Plumbing opened a "Residential Septic System Dewatering Station. Please read about the details in the cover letter.



Thursday, January 4, 2018

Jerry Wilburg
Managing Member
Gruv-N-Gasket, LLC
705 South 12th Street
Broken Arrow, OK 74012

Re: City of Broken Arrow Industrial Waste Zero-Discharge Permit # BA023 Closeout

Dear Mr. Wilburg,

I received your letter yesterday advising the City of Broken Arrow Pretreatment Office that Gruv-N-Gasket LLC has shut down the non-discharge operation that was permitted under City of Broken Arrow Industrial Waste Zero-Discharge Permit # BA023. I also received the Safety Kleen manifest # 38313 from 12/28/17 that you received when the recycle tanks/sump were pumped out and hauled offsite. City of Broken Arrow Industrial Waste Zero-Discharge Permit # BA023 is hereby closed out. I am sorry to hear that the operation has closed. It has been a pleasure working with you. I wish you all the best in your future endeavors.

Sincerely,

Lauren Wilson
Pretreatment Coordinator
City of Broken Arrow
485 N. Poplar Ave.
(918) 259-7000 ext. 7220
lwilson@brokenarrowok.gov

SECTION 3:

NON-COMPLIANT INDUSTRIAL USERS

Date	Average Daily Flow GPD	Average Flow MGD	BOD Mg/L	BOD lbs/day	BOD Average lbs/month	BOD Daily TRC	TSS mg/L	TSS lbs/day	Oil & Grease mg/L	pH	
SNC Calculation for 2nd Qtr. Jan-Mar (Oct-Mar)											
3/14/18	85874	0.086	1550	1110.09	971.15	1110.09	258	184.78	75.9	6.4	
3/15/18	85874	0.086	844	604.46		604.46	182	130.35	63.1	6.03	
3/16/18	85874	0.086	1780	1274.82		1274.82	364	260.69	103	9.77	
3/20/18	85874	0.086	464	332.31		332.31	61	43.69	72.2	11.45	
3/21/18	85874	0.086	1920	1375.08		1375.08	221	158.28	113	5.26	
3/22/18	85874	0.086	1570	1124.42		1124.42	630	451.20	6.4	7.8	
3/23/18	85874	0.086	2070	1482.51		1482.51	1070	766.32	114	10.93	
4/10/18	94807	0.095	730	577.20		577.20	472.83	266	210.32	114	12.13
4/11/18	94807	0.095	598	472.83		472.83	180	142.32	16.5	9.53	
4/12/18	94807	0.095	4290	3392.06		3392.06	808	636.88	72.6	11.06	
4/13/18	94807	0.095	1720	1359.99	1359.99	378	298.88	55.3	9.36		
4/19/18	94807	0.095	4060	3210.20	3210.20	1890	1494.40	96.5	10.13		
4/20/18	94807	0.095	1710	1352.08	1352.08	440	347.90	82.8	10.35		
5/8/18	108229	0.108	1270	1146.34	1146.34	1727.39	285	522.12	82.8	10.61	
5/9/18	108229	0.108	1300	1173.42	1173.42	1173.42	396	357.44	48.4	10.01	
5/10/18	108229	0.108	1500	1353.94	1353.94	347	313.21	83.8	9.39		
5/11/18	108229	0.108	990	893.60	893.60	294	265.37	260	8.23		
5/15/18	108229	0.108	793	715.79	715.79	464	418.82	94.2	6.19		
5/16/18	108229	0.108	1640	1480.31	1480.31	840	758.21	38.7	9.04		
5/17/18	108229	0.108	661	596.64	596.64	1180	1065.10	70.3	7.72		
5/18/18	108229	0.108	1550	1399.08	1399.08	1010	911.66	9.9	10.41		
6/5/18	120690	0.121	1230	1238.06	1094.89	1094.89	686	543.38	18.6	6.88	
6/6/18	120690	0.121	1380	1389.05	1389.05	476	479.12	23.2	10.33		
6/7/18	120690	0.121	1410	1419.24	1419.24	826	831.41	87.2	7.06		
6/8/17	120690	0.121	2900	2919.01	2919.01	844	849.53	49.3	8.49		
6/12/18	120690	0.121	838	843.49	843.49	350	352.29	62.7	6.19		
6/13/18	120690	0.121	1130	1137.41	1137.41	843	848.53	28.9	9.04		
6/14/18	120690	0.121	2990	3009.60	3009.60	589	592.86	56.5	7.72		
6/15/18	120690	0.121	1140	1147.47	1147.47	404	406.65	35.3	10.41		
SNC Calculation for 3rd Qtr. Apr-Jun (Jan-Jun)											
7/17/18	105726	0.106	841	741.56	1637.92	1637.92	232	631.36	63.5	9.34	
7/18/18	105726	0.106	1420	1252.09	1252.09	741.56	204.57	42.5	8.18		
7/19/18	105726	0.106	1730	1525.44	1525.44	678	597.83	196	7.78		
7/20/18	105726	0.106	900	793.58	793.58	575	507.01	362	7.05		
7/10/18	105726	0.106	1640	1446.08	1446.08	2170	1913.41	149	7.7		
7/11/18	105726	0.106	1770	1560.71	1560.71	603	531.70	27.8	10.12		
7/12/18	105726	0.106	2860	2521.82	2521.82	486	428.53	20.3	6.73		
				21.7% Chronic Violations	17.4% TRC Violation	9% TRC Violations					
				741.56	1637.92	971.15					
				1252.09	1525.44	793.58					
				1446.08	1560.71	2521.82					
				741.56	1637.92	971.15					
				1252.09	1525.44	793.58					
				1446.08	1560.71	2521.82					
				741.56	1637.92	971.15					
				1252.09	1525.44	793.58					
				1446.08	1560.71	2521.82					
				741.56	1637.92	971.15					
				1252.09	1525.44	793.58					
				1446.08	1560.71	2521.82					

Date	Average Daily Flow GPD	Average flow MGD	BOD Mg/L	BOD lbs/day	BOD Average lbs/month	BOD Daily TRC	TSS mg/L	TSS lbs/day	Oil & Grease mg/L	pH
7/13/18	105726	0.106	1330	1172.73		1172.73	430	379.15	121	10.52
8/14/18	100739	0.101	3500	2940.57	1376.75	1376.75	988	746.63	173	9.02
8/15/18	100739	0.101	1530	1285.45	2940.57	2940.57	270	830.08	82.8	7.61
8/16/18	100739	0.101	2880	2419.67	1285.45	1285.45	783	226.84	108	8.91
8/17/18	100739	0.101	2250	1890.37	2419.67	2419.67	692	657.85	117	11.64
8/21/18	100739	0.101	2120	1781.15	1890.37	1890.37	1240	581.39	225	11.06
8/22/18	100739	0.101	2020	1697.13	1781.15	1781.15	895	1041.80	38.3	5.5
8/23/18	100739	0.101	6900	5797.13	1697.13	1697.13	1320	751.95	148	6.81
8/24/18	100739	0.101	1820	1529.10	5797.13	5797.13	565	1109.02	149	10.21
9/18/18	105577	0.106	1640	1444.04	2417.57	2417.57	453	709.20	148	9.25
9/19/18	105577	0.106	2670	2350.97	1444.04	1444.04	742	398.87	40	10.29
9/20/18	105577	0.106	1810	1593.73	2350.97	2350.97	660	653.34	53.4	8.85
9/21/18	105577	0.106	1190	1047.81	1593.73	1593.73	495	581.14	368	9.24
9/25/18	105577	0.106	4510	3971.11	1047.81	1047.81	919	435.85	70.3	9.97
9/26/18	105577	0.106	5120	4508.22	3971.11	3971.11	497	809.19	151	6.5
9/27/18	105577	0.106	2200	1937.13	4508.22	4508.22	740	437.61	207	7.22
9/28/18	105577	0.106	1430	1259.13	1937.13	1937.13	373	651.58	41.4	9.58
SNC Calculation for 4th Qtr Jul-Sep (Apr-Sep)					2264.82	17.3% TRC Violation	2264.02	537.00		
				24% Chronic Violations						

* Violations are shaded. 24-Hour notifications were received by the City of Broken Arrow Pretreatment Office for each violation.

SECTION 4:

SIGNIFICANTLY NON-COMPLIANT INDUSTRIAL USERS

SECTION 5:

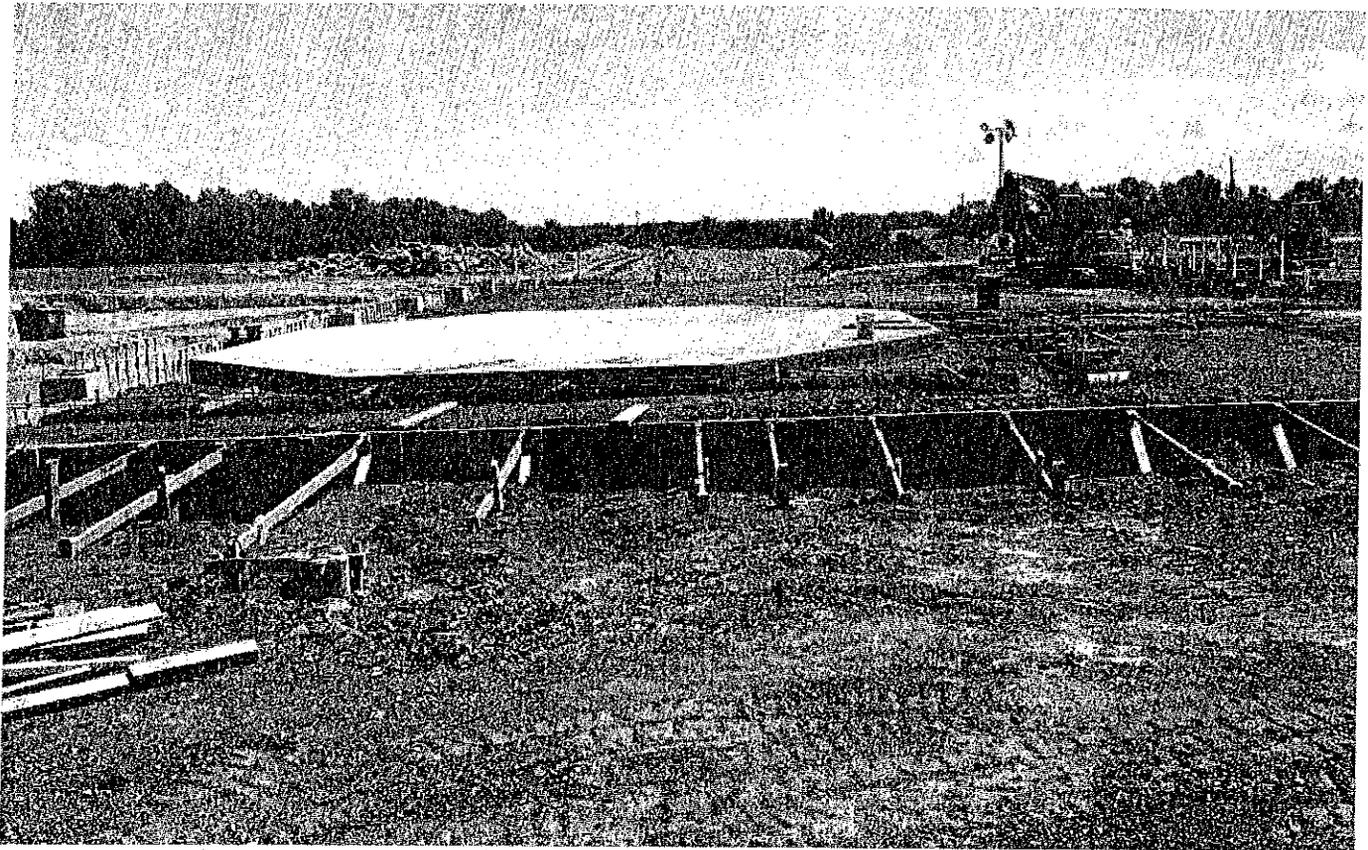
NEWSPAPER PUBLICATION OF SIGNIFICANTLY NON-COMPLIANT INDUSTRIAL USERS

No Industrial users in the City of Broken Arrow Lynn Lane Wastewater Treatment Plant Basin were published in the newspaper for significant non-compliance for the October 2017 to September 2018 pretreatment year.

SECTION 6:

COMPLIANCE SCHEDULES

**Blue Bell Broken Arrow
Waste Water Pre-Treatment Plant
Broken Arrow, OK
Job Status Report
August 2018**



**BRASFIELD
& GORRIE**
GENERAL CONTRACTORS

3021 7th Avenue South • Birmingham, Alabama 35233
205.328.4000 • Fax 205.251.1304
www.brasfieldgorrie.com

PROJECT SUMMARY

Blue Bell Creameries, Gresham Smith and Partners, and Brasfield & Gorrie have teamed up to design and construct a 10,943 square foot facility capable of pre-treating the existing Blue Bell facility's production waste before entering the municipal sewer system. This facility will house a Waste Water Pre-Treatment system designed and provided by World Water Works, Incorporated. The treatment package will apply the following treatment services;

- Side Hill Screen (SHS): Allows for easy removal of solids from the incoming waste water.
- Equalization (EQ) Tank: This 157,100-gallon tank will allow for the normalization and control of flow coming into the waste water system.
- Dissolved Air Flotation (DAF): Removes suspended solids, fats, oils and grease from the wastewater flow. This is achieved by introducing micro-air-bubbles that cause the suspended materials to float to the surface allowing liquid/solids separation.

The process equipment from World Water Works is scheduled to begin arriving on the jobsite in mid to late September. Upon equipment arrival, Brasfield & Gorrie will begin the installation process. Based on the current schedule, it is projected that the Waste Water Pre-Treatment System will be online starting March 13, 2019.

PROJECT COSTS

The current construction amount for the Blue Bell Waste Water Pre-Treatment Plant facility is \$6,919,603. Of that contract amount, \$1,150,184 is designated to the process equipment that will be treating the existing Blue Bell facility wastewater.

SCHEDULE

The final-completion date for the project is currently scheduled for March 19, 2019. The critical path for the entire project currently runs through the completion of the concrete foundation work, the EQ Tank construction, and the Erection of the Pre-Engineered Metal Building. Also, to help expedite the schedule, the process equipment was released prior to the start of construction to ensure availability for delivery as needed.

Completed/Ongoing activities:

1. Put erosion control and BMP into place.
2. Grade and excavate land to required elevations to begin concrete work.
3. Identify and relocate existing 6" sanitary sewer line that was incorrectly run through Blue Bell's property instead of a designated easement around the property. This was a 5-day schedule impact.
4. Deep spread footings and continuous footings on the north side of building have been installed.
5. All drilled concrete piers have been put into place (23 total).
6. Completed tank pad construction for the 157,100-gallon EQ Tank.
7. All shallow spread footings and pilasters have been put into place.
8. The ground has been brought up to the proper subgrade elevation using 30" of select fill.
9. In and under electrical and plumbing began the week of August 06, 2018.
10. Currently forming and placing slab on grade rebar in place.

Upcoming activities:

1. Pour concrete slab on grade.
2. Erect EQ Tank.
3. Erect Pre-Engineered Metal Building.
4. Set treatment area precast wet well/influent pump station.
5. Install influent pumps and piping.
6. Install World Water Works Equipment.

Enclosed is the updated Overall Project Schedule as of August 13, 2018.



**Blue Bell Broken Arrow WWPTP
JOB STATUS REPORT
AUGUST 2018**

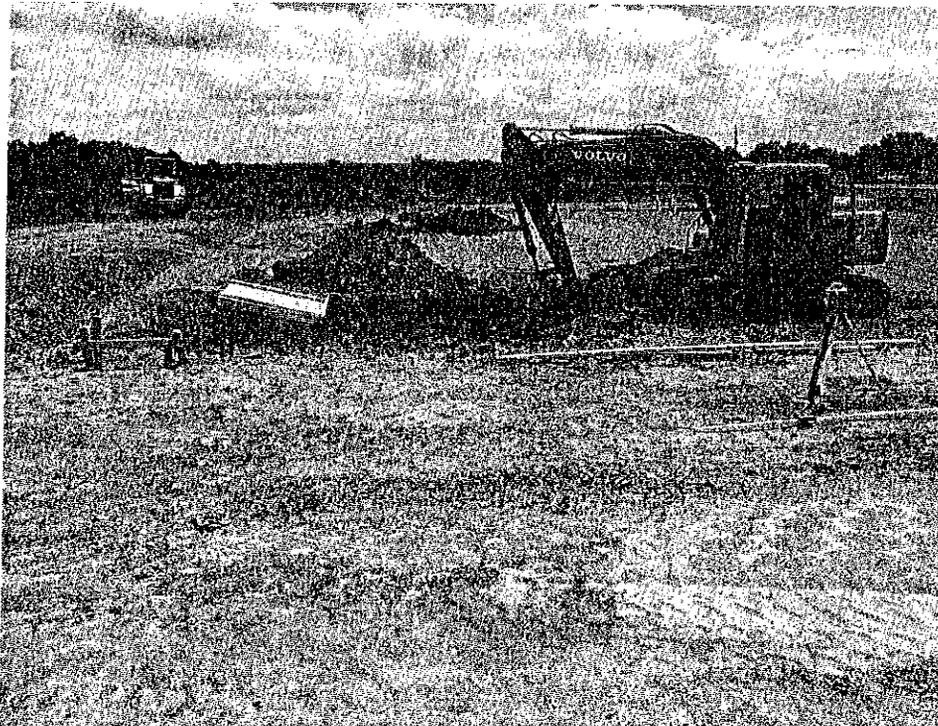
Attachments

Attachment A: Progress Photos

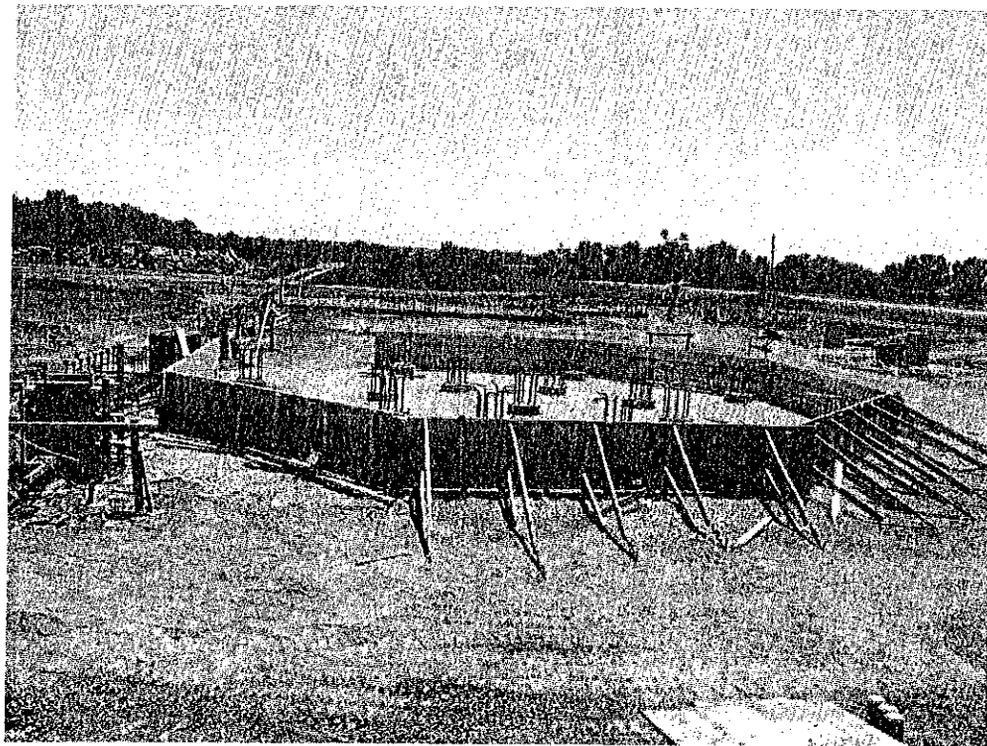
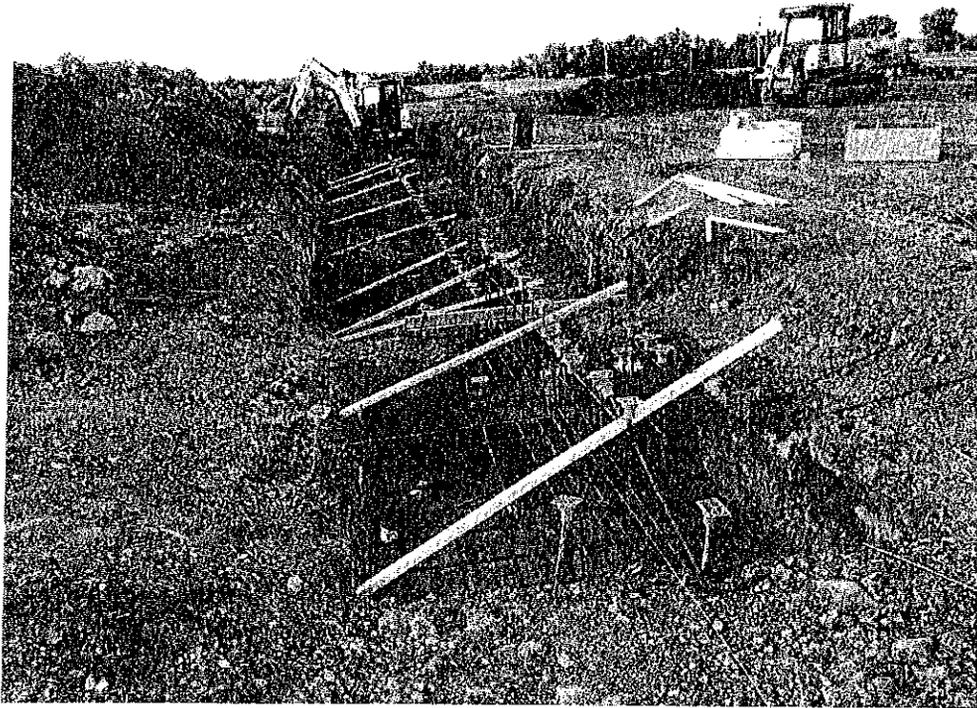
Attachment B: Profile of unidentified 6" Sanitary Sewer line through Blue Bell's property.

Attachment C: Current Overall Project Schedule

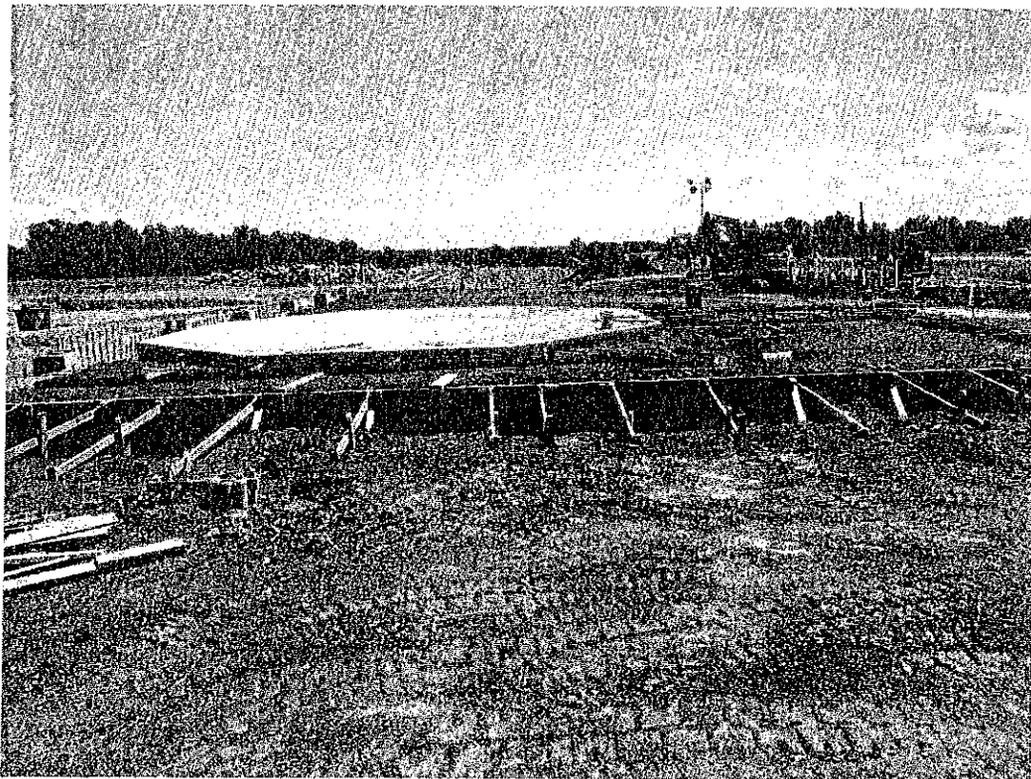
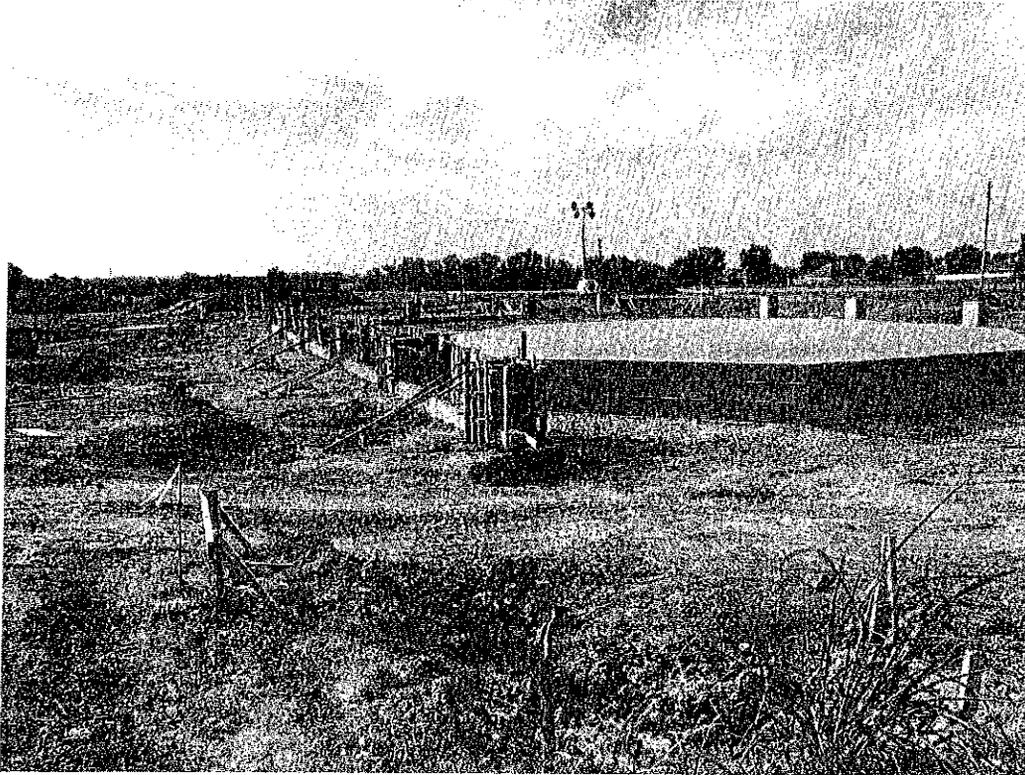
June 2018 – Monthly Progress Photos



July 2018 – Monthly Progress Photos



August 2018 – Monthly Progress Photos





Design Services
For The Built
Environment

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BLUE BELL
CREAMERIES

BLUE BELL BROKEN ARROW WASTE
WATER PRE-TREATMENT PLANT



No.	Date	Description
1	12.14.17	IPC
2	05.15.18	AGENCY COMMENTS
3	05.15.18	MODIFY COMMENTS

GRAADING PLAN

C301

PROJECT: 0325401
DATE: 12/14/17

PIPE TABLE

NAME	MATERIAL	DIA.	APPROX. LENGTH	APPROX. SLOPE	Q ₁	Q ₂	Q ₃	Q ₄	Q ₅	Q ₆
AT	INCH	FT	MI	PERCENT	CS	CS	CS	CS	CS	CS
					1.17 CFS	1.24 CFS	1.28 CFS	1.32 CFS	1.40 CFS	1.44 CFS

UTILITY PROTECTION NOTE

ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. INDIVIDUAL SERVICE LOCATIONS SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BEING AWARE OF ALL UTILITIES AND REQUIREMENTS SET FORTH ON THE PLANS.

LEGEND

- PROPERTY LINE
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- UNDESIGNED RELIQUATION
- MATCH EXISTING FINISHED GRADE

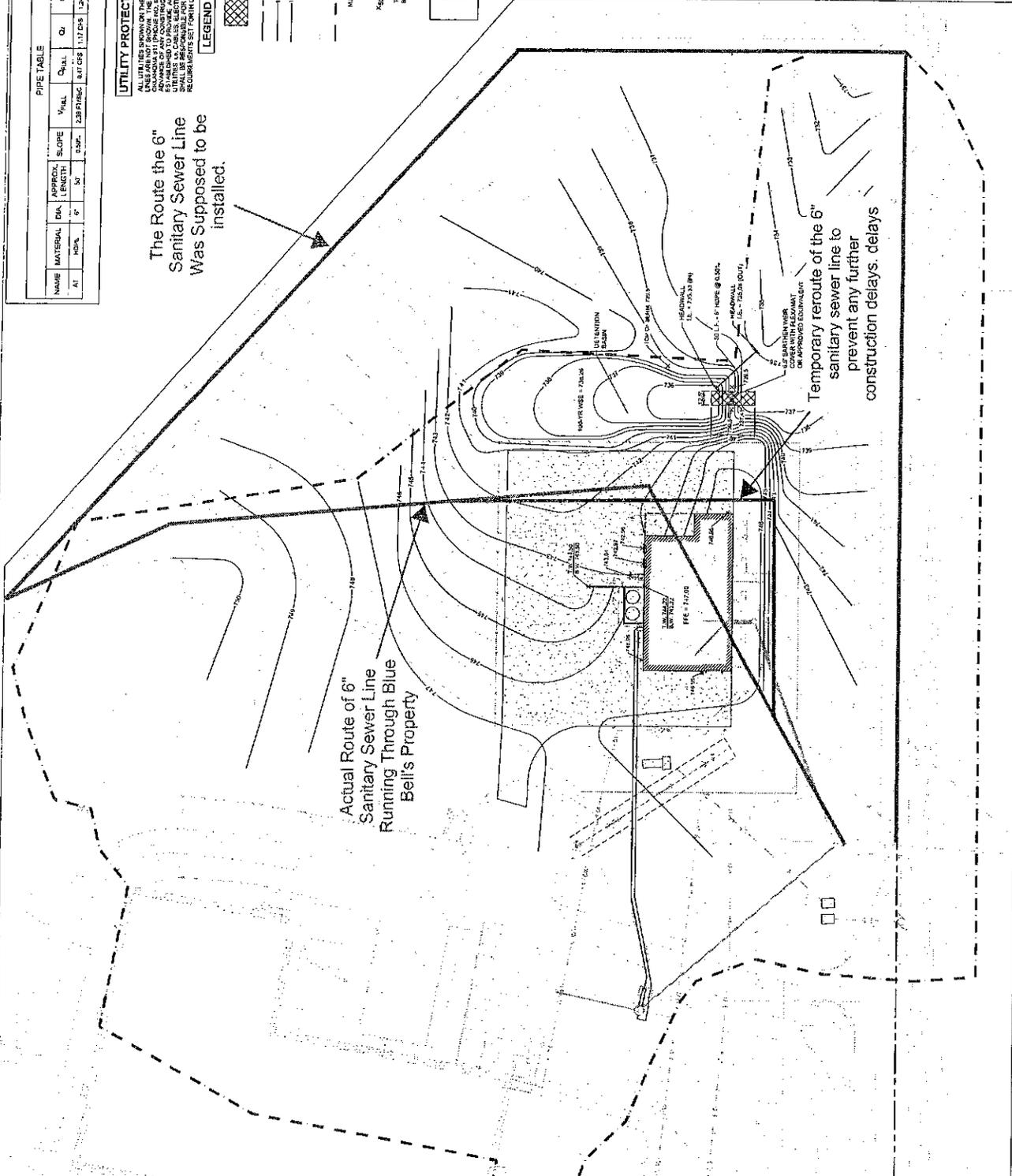
SPOT ELEVATION
FINISHED FLOOR COMPLETION
FINISHED GRADE
BOTTOM OF FINISHED GRADE

EXISTING IMPROVEMENTS = 248.42
PROPOSED IMPROVEMENTS = 248.42
PROPOSED PERMITS = 248.42

The Route the 6" Sanitary Sewer Line Was Supposed to be installed.

Actual Route of 6" Sanitary Sewer Line Running Through Blue Bell's Property

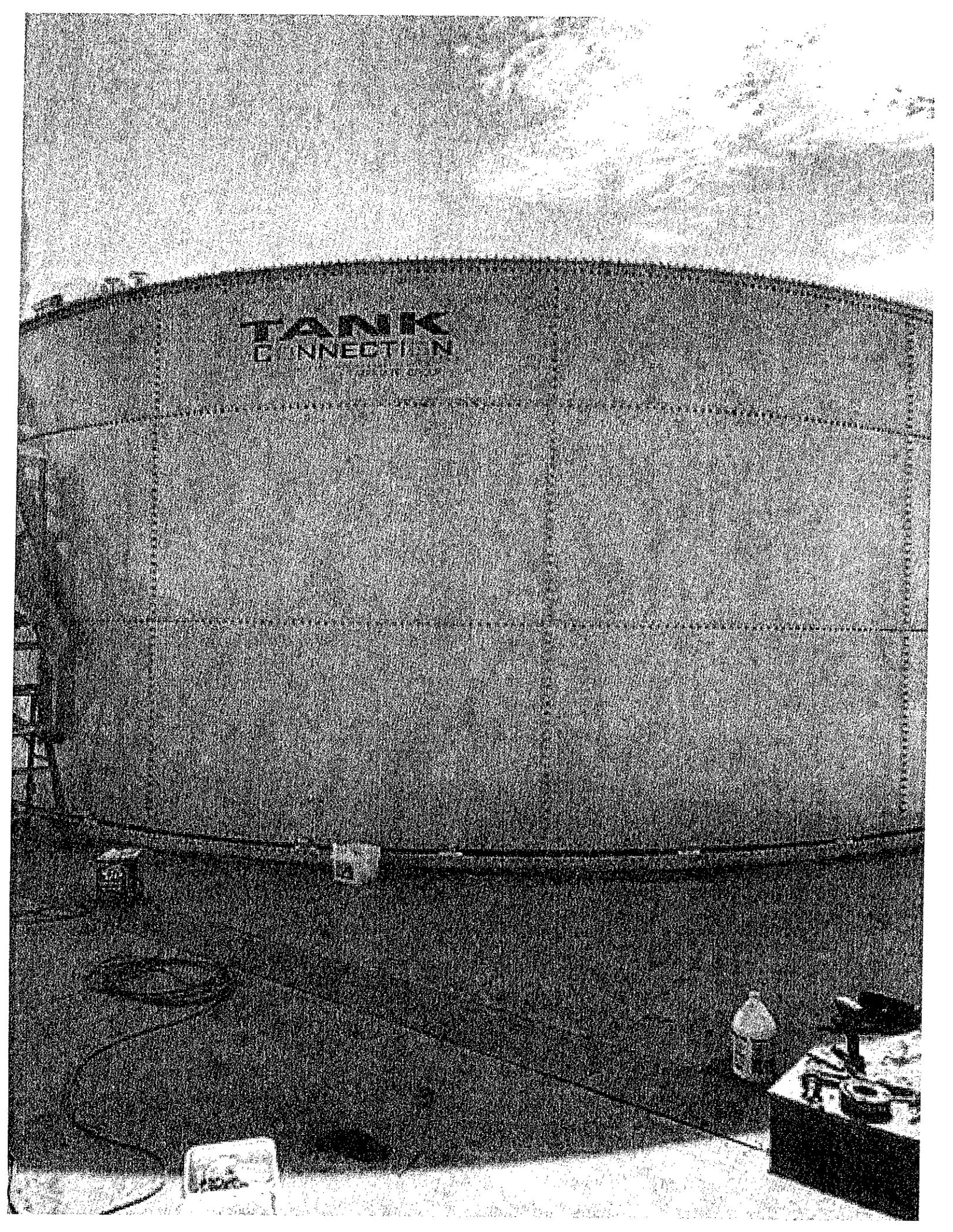
Temporary reroute of the 6" sanitary sewer line to prevent any further construction delays.

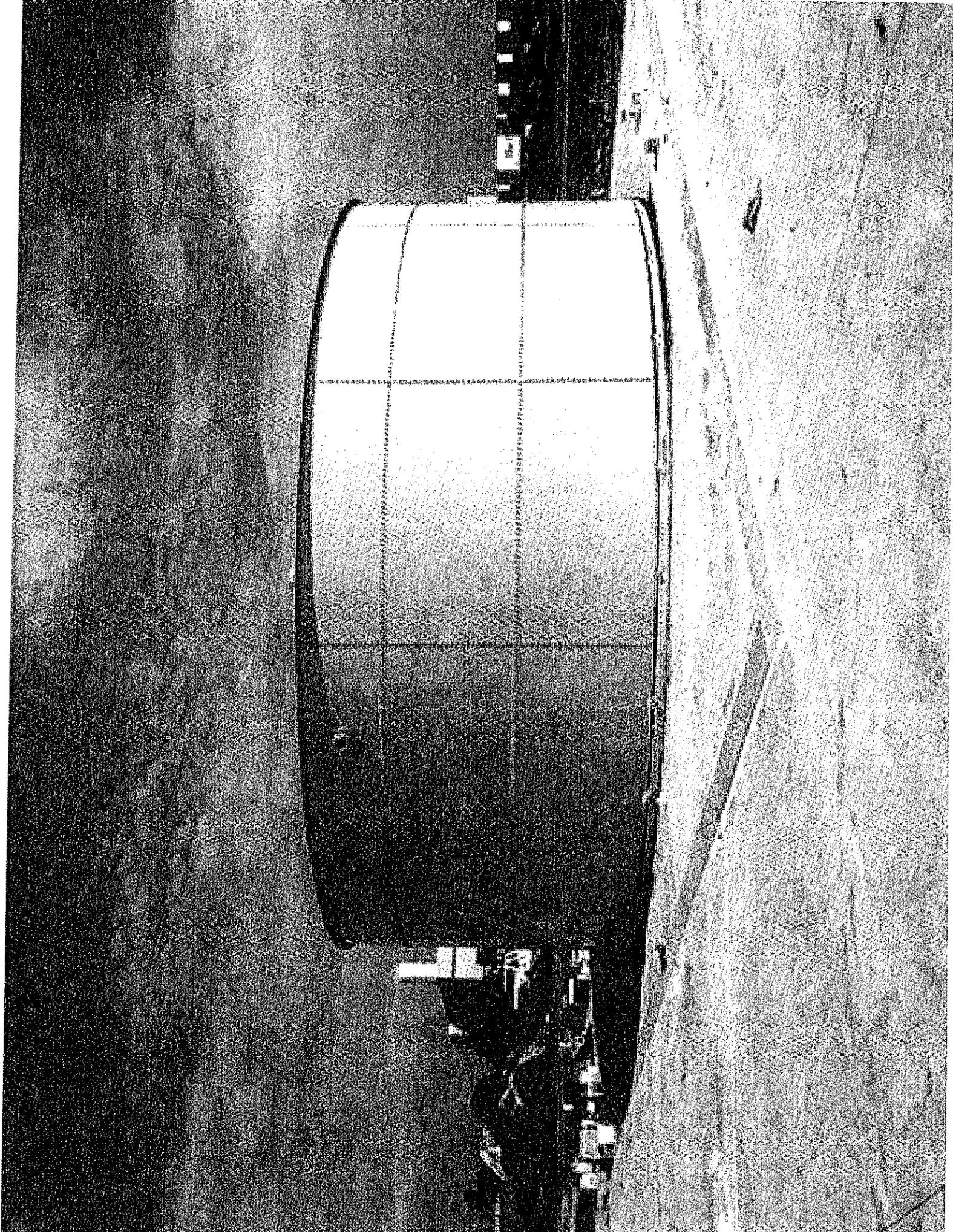


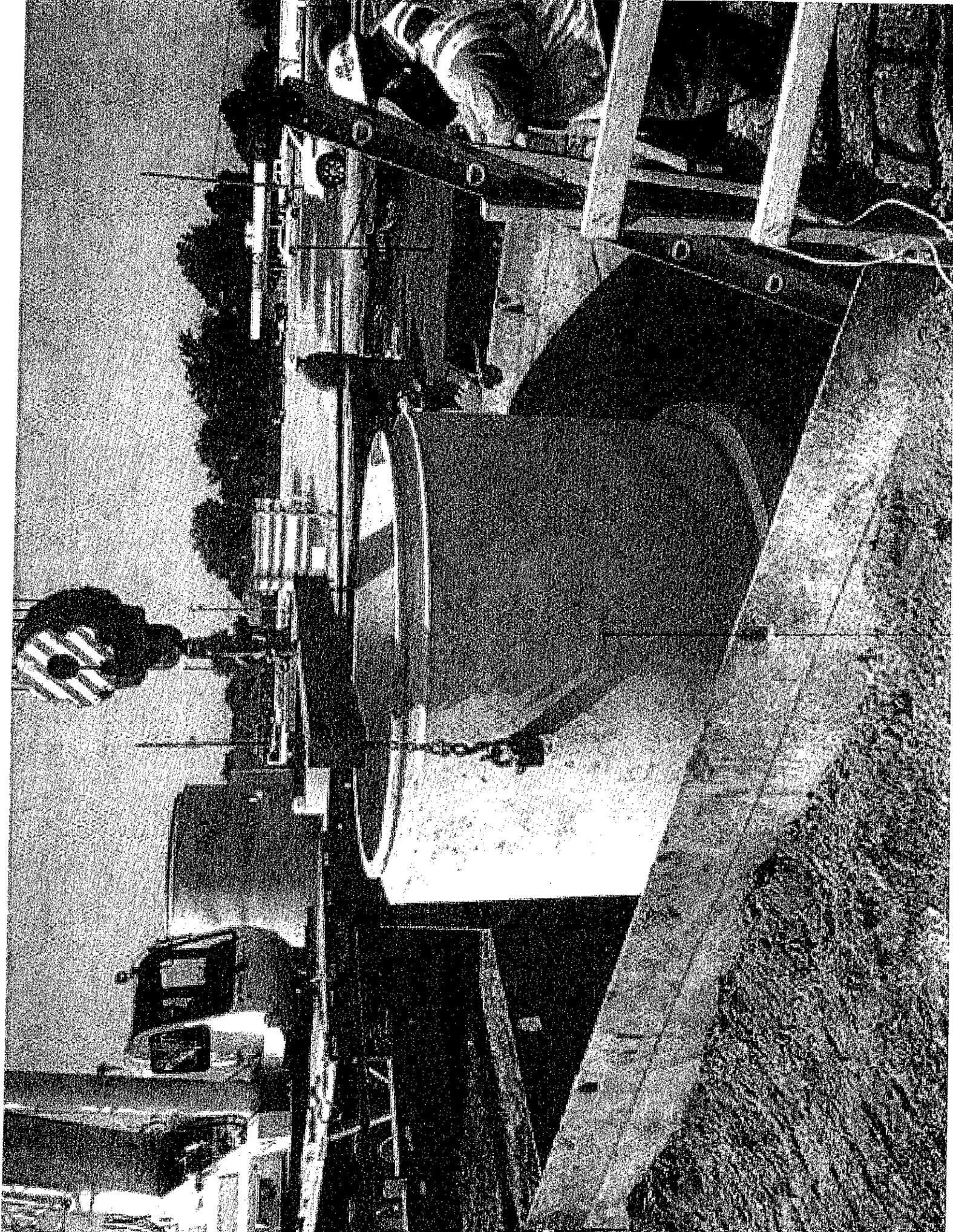
GRAPHIC SCALE

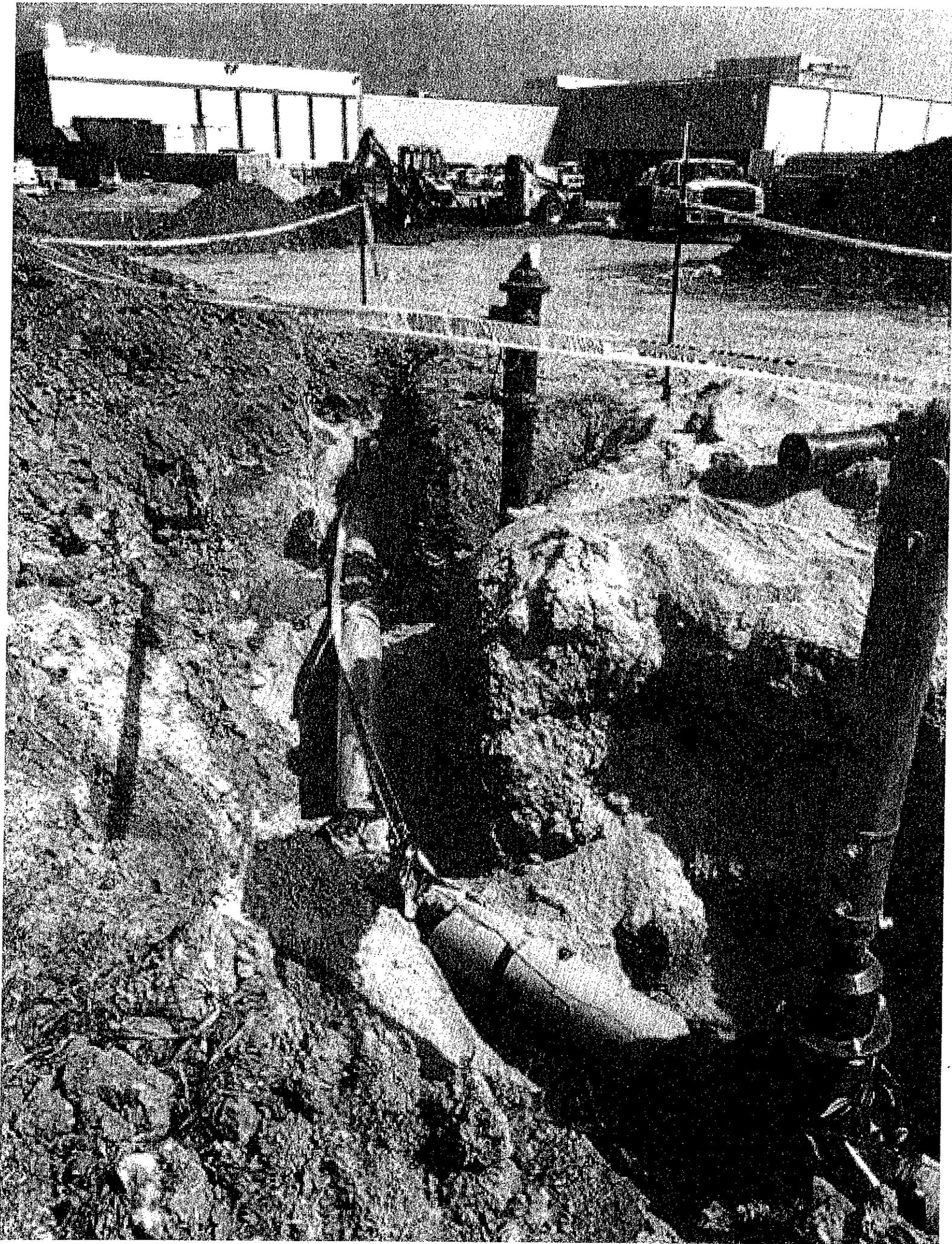
Drawn By: [Blank]
Checked By: [Blank]
Approved By: [Blank]

TANK
CONNECTION









SECTION 7:

LYNN LANE WASTEWATER TREATMENT PLANT

**WATER QUALITY BASED EFFLUENT
CONCENTRATIONS**



BROKEN ARROW

Technically Based Local Limits Development
Sampling Plan 2018

For: Lynn Lane Wastewater Treatment Plant
Facility ID S-20409
OPDES Permit OK0040059

Sampling Parameters

Toxic Pollutants

Antimony
Arsenic
Beryllium
Cadmium
Total Chromium
Hexavalent Chromium
Copper
Lead
Molybdenum
Nickel
Selenium
Silver
Thallium
Zinc
Mercury
Cyanide

Conventional Pollutants

BOD
TSS
Oil & Grease
Total Phosphorus
Ammonia
pH
Temperature

Manhole Selection

Industrial – Three manholes that intercept flow from industrial parks

Pinalto

Sentinel

Blue Bell

Commercial – Two manholes that intercept commercial flow

Arrow Village Shopping Center

Water Tower Park

Residential – One manhole that intercepts residential flow

Goodwill

* Influent and Effluent Priority Pollutant Scans shall also be used in calculating technically based local limits.



CITY OF
BROKEN ARROW
Where opportunity lives

N/2 Sec 13, T18N, R14E

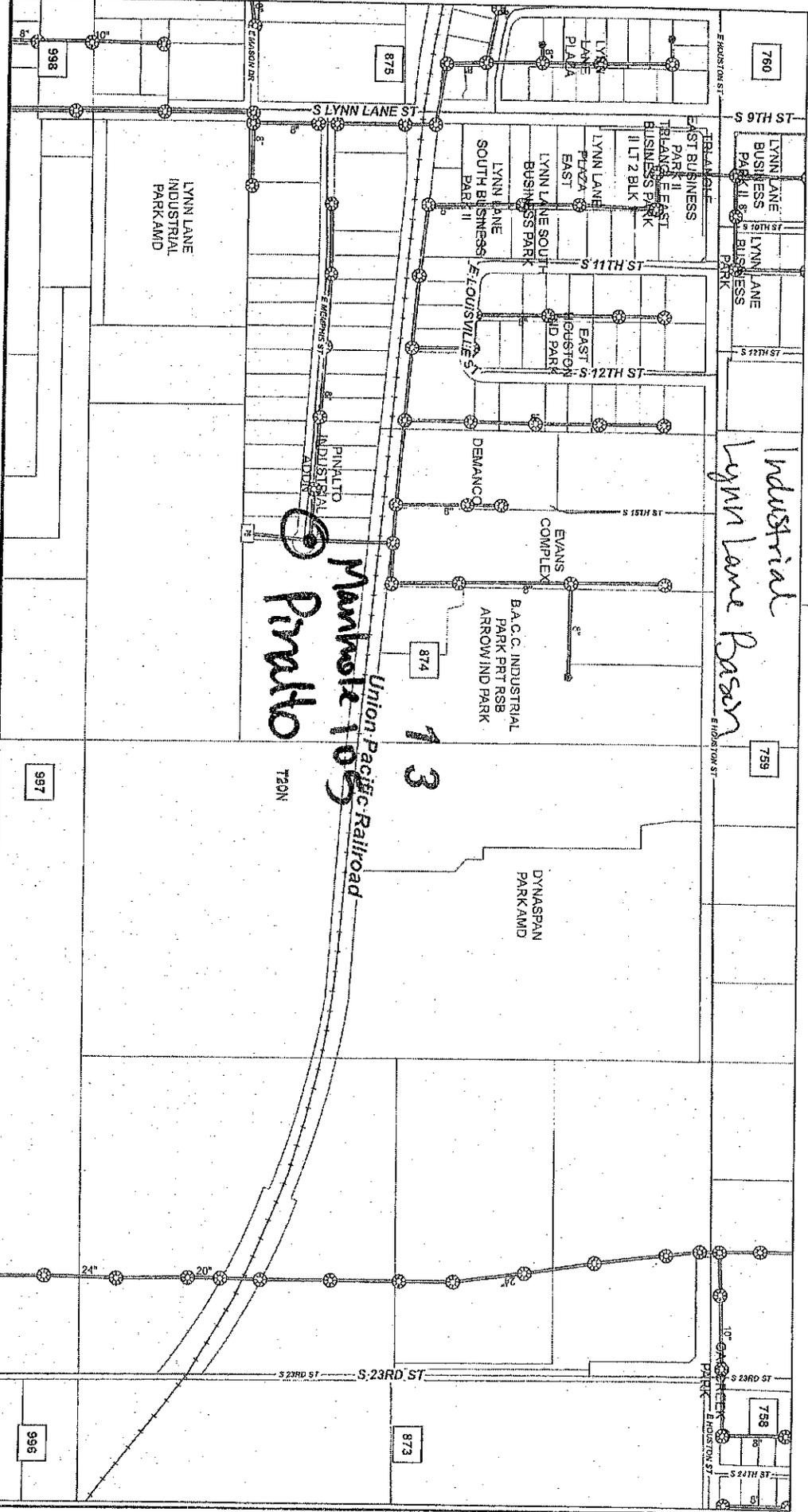
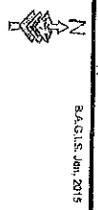
**CITY OF BROKEN ARROW, OK
SANITARY SEWER ATLAS SHEET**

- Legend**
- Non-Standard Down Addresses
 - Structure Type
 - Flow Meter
 - Concrete Separator
 - Lift Station
 - Split Manhole
 - Storage Tank
 - Sewer Clean Out
 - Storm Manhole
 - Storm Gravity Man

DISCLAIMER

The map is prepared by GIS based on data provided by various agencies. It is provided for informational purposes only. The City of Broken Arrow assumes no liability for the accuracy of information contained on this map. It is recommended that users verify the information contained on this map.

1 Inch = 400 feet

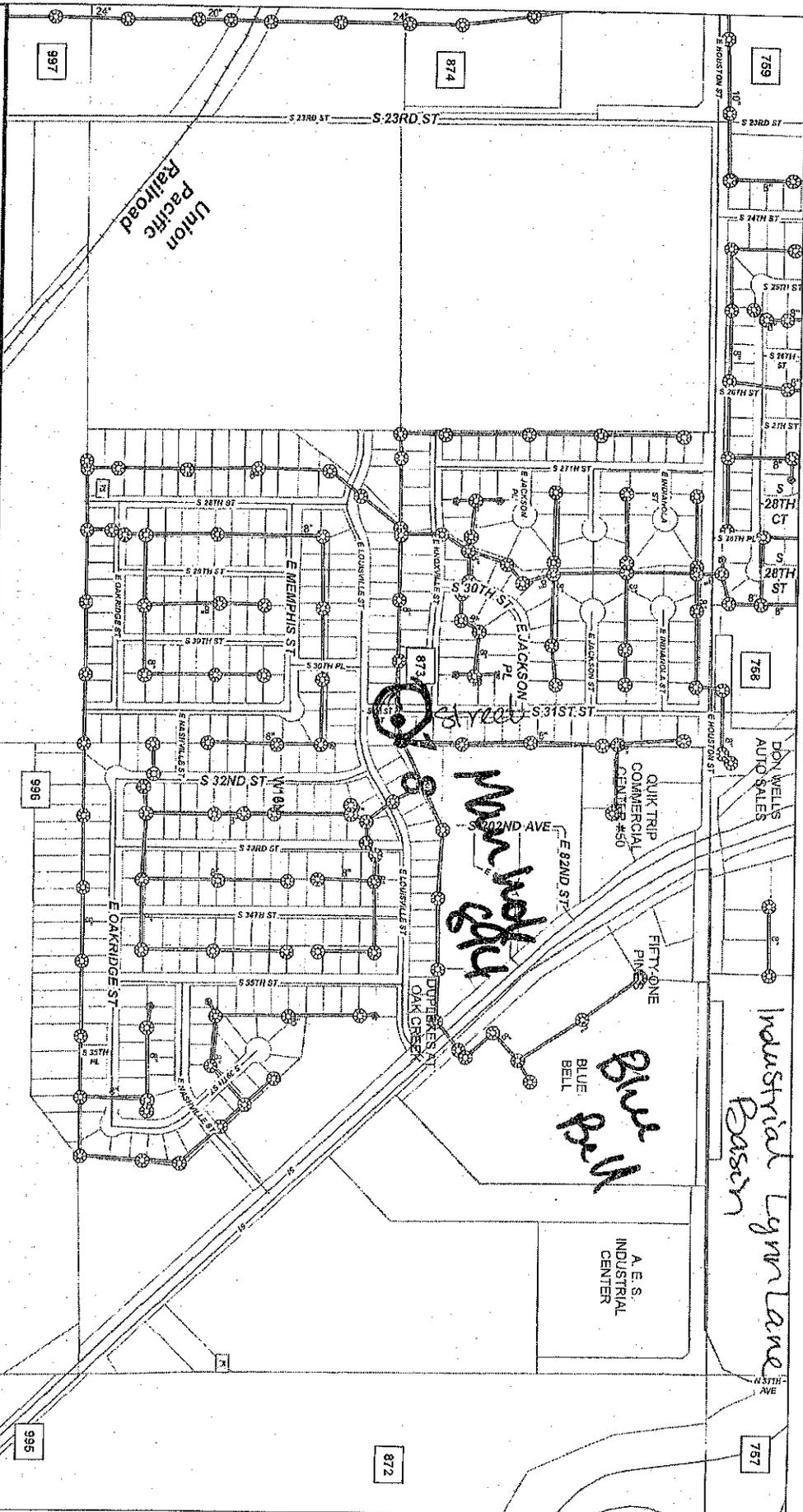




CITY OF
BROKEN ARROW
Where opportunity lives

N/2 Sec 18, T18N, R15E

CITY OF BROKEN ARROW, OK
SANITARY SEWER ATLAS SHEET



- Legend**
- Spot Elevation - Show Address
 - Structure Type
 - Pipe Size
 - Sewer Separals
 - Infiltration
 - S&P Manhole
 - Manhole Basin
 - Sewer Clean Out
 - Sewer Manhole
- Scale: 1" = 400'

DISCLAIMER

This map is prepared by GIS public access is provided for public information. It is not intended for use in any legal proceeding. The City of Broken Arrow assumes no liability for any errors or omissions on this map. The primary source for this data is the City of Broken Arrow GIS Department.



CITY OF
BROKEN ARROW
Where opportunity lives

N/2 Sec 36, T19N, R14E

CITY OF BROKEN ARROW, OK
SANITARY SEWER ATLAS SHEET

- Legend**
- Non-Sanitary Sewer Access/Manhole
 - Structure Type
 - Flow Meter
 - Sewer Depression
 - Lift Station
 - Silt Manhole
 - Sump Clean Out
 - Sewer Manhole
 - Storm Gully Manhole

DISCLAIMER

This map is prepared by G.I.S. for the City of Broken Arrow, Oklahoma. It is not intended to be used for any other purpose. The City of Broken Arrow, Oklahoma, is not responsible for any errors or omissions on this map. The user of this map is advised that this is a preliminary map and should not be used for any other purpose.

1 inch = 400 feet

5.6.015, Jan, 2015

