



**LEGEND**

EXISTING WATER MAIN	---
PROPOSED WATER MAIN	—
EXISTING WATER VALVE	—+—
PROPOSED WATER VALVE	—+—
EXISTING FIRE HYDRANT	—●—
PROPOSED FIRE HYDRANT	—●—
EXISTING BLOW OFF	—+—
PROPOSED BLOW OFF	—+—

- CONTROL POINTS**
- Pt. No. 101  
N: 1,678,679.1420, E: 1,700,915.2030  
1/2" REBAR W/ PEC CAP  
1. 4.30' EAST TO THE WEST EDGE OF ASPHALT ON BROOKHAVEN DRIVE.  
2. 8.10' WEST-SOUTHWEST TO A MAG NAIL N THE SOUTHEAST FACE OF THE FIRST POWER POLE NORTH OF HARRY STREET.  
3. 21.70' SOUTH TO THE BASE OF THE STOP SIGN POST.
- Pt. No. 102  
N: 1,679,233.7910, E: 1,700,907.3770  
1/2" REBAR W/ PEC CAP  
1. 3.40' WEST TO A MAG NAIL IN THE SOUTH FACE OF THE 2ND POWER POLE NORTH OF HARRY STREET.  
2. 4.00' EAST TO THE WEST EDGE OF ASPHALT ON BROOKHAVEN DRIVE.  
3. 45.30' EAST NORTHEAST TO BENCHMARK #202.
- Pt. No. 103  
N: 1,680,219.3770, E: 1,700,928.7330  
1/2" REBAR W/ PEC CAP  
1. 6.70' WEST TO THE EAST EDGE OF ASPHALT ON BROOKHAVEN DRIVE.  
2. 16.70' EAST T THE NORTH-SOUTH WOVEN WIRE FENCE.  
3. 51.10' NORTHWEST TO A MG NAIL IN THE SOUTH FACE OF THE FIRST WOOD GUARD POST NORTH OF ZIMMERLY STREET.
- Pt. No. 104  
N: 1,681,192.1050, E: 1,700,877.2250  
1/2" REBAR W/ PEC CAP  
1. 30.00' SOUTH TO THE BASE OF THE SOUTHERN MOST CHEVRON SIGN POST.  
2. 49.70' EAST TO THE BASE OF THE S. BROOKHAVEN DRIVE/E. LINCOLN STREET SIGN POST.  
3. 18.00' WEST TO A MAG NAIL AND SHINER IN THE NORTH FACE OF A 12' HEDGE TREE.
- Pt. No. 105  
N: 1,681,242.2190, E: 1,701,629.6590  
1/2" REBAR W/ PEC CAP  
1. 4.70' NORTH NORTHWEST TO THE BASE OF THE SOUTHWEST HAZARD SIGN POST.  
2. 5.80' NORTH TO THE SOUTH EDGE OF ASPHALT ON LINCOLN STREET.  
3. 45.90' EAST-NORTHEAST TO THE BASE OF THE SOUTHEAST HAZARD SIGN POST.
- Pt. No. 106  
N: 1,681,255.8230, E: 1,702,189.6340  
1/2" REBAR W/ PEC CAP  
1. 51.50' NORTH NORTHEAST TO THE BASE OF THE NORTHERNMOST CHEVRON SIGN POST.  
2. 65.90' WEST-SOUTHWEST TO THE BASE OF THE WESTERNMOST CHEVRON SIGN POST.  
3. 35.70' SOUTH SOUTHEAST TO A MAG NAIL AND SHINER IN THE TOP OF THE CORNER FENCE POST.
- Pt. No. 107  
N: 1,682,227.9730, E: 1,702,184.9640  
1/2" REBAR W/ PEC CAP  
1. 10.60' SOUTHEAST TO AN ELECTRICAL LINE RISER.  
2. 10.00' WEST TO THE EAST EDGE OF ASPHALT ON S. 159TH STREET EAST.  
3. 30.00' NORTH TO THE BASE OF THE EAST HAZARD SIGN POST.

- BENCHMARK LIST**
- BM #201 - SQUARE CUT ON THE SOUTH END OF A 24" RCE ON THE NORTHWEST CORNER OF THE INTERSECTION OF BROOKHAVEN DR. AND HARRY STREET. ± 8.00' EAST TO THE WEST EDGE OF ASPHALT OF BROOKHAVEN DRIVE. ± 4.00' WEST TO A MAG NAIL IN THE SOUTHEAST FACE OF A POWER POLE. ± 19.50' SOUTH-SOUTHEAST TO THE BASE OF THE STOP SIGN POST.  
ELEV. 1291.37 (NAVD88)
- BM #202 - SQUARE CUT NEAST THE SOUTHWEST CORNER OF THE CONCRETE FOOTING UNDER THE NORTH-SOUTH CHAINLINK FENCE ON THE EAST SIDE OF BROOKHAVEN DRIVE. ± 15.50' WEST TO THE EAST EDGE OF ASPHALT OF BROOKHAVEN DRIVE. ± 0.8' EAST TO THE CHAINLINK FENCE. ± 45.00' WEST SOUTHWEST TO HORIZONTAL CONTROL POINT #102.  
ELEV. 1299.76 (NAVD88)
- BM #203 - T-POST SET FLUSH WITH THE GROUND ON THE WEST SIDE OF BROOKHAVEN DRIVE. ± 3.00' WEST TO THE EAST FACE OF THE 1ST POWER POLE SOUTH OF ZIMMERLY STREET. ± 4.00' EAST TO THE WEST EDGE OF ASPHALT ON BROOKHAVEN DRIVE.  
ELEV. 1298.22 (NAVD88)
- BM #204 - SQUARE CUT ON THE SOUTH CURB LINE OF E. ZIMMERLY STREET. ± 18.50' EAST TO THE BASE OF THE STOP SIGN POST. ± 66.00' NORTHEAST TO A MAG NAIL IN THE SOUTH FACE OF A WOOD GUARD POST.  
ELEV. 1302.73 (NAVD88)
- BM #205 - T-POST SET FLUSH WITH THE GROUND ON THE EAST SIDE OF BROOKHAVEN DRIVE. ± 22.00' WEST TO THE EAST EDGE OF ASPHALT ON BROOKHAVEN DRIVE. ± 1.00' EAST TO A NORTH-SOUTH WOVEN WIRE FENCE. ± 54.00' NORTHWEST TO THE SOUTHEAST CORNER OF BRICKS AROUND THE MAILBOX AT 1249 S. BROOKHAVEN DRIVE.  
ELEV. 1298.58 (NAVD88)
- BM #206 - T-POST SET FLUSH WITH THE GROUND, NORTH OF THE WEST GATE POST, NEAR THE INTERSECTION OF S. BROOKHAVEN DRIVE AND E. LINCOLN STREET. ± 60.00' WEST TO THE BASE OF STREET SIGN POST (S. BROOKHAVEN DRIVE / E. LINCOLN STREET). ± 1.00' SOUTH TO THE WEST GATE POST. ± 30.00' NORTH TO THE SOUTH EDGE OF ASPHALT OF LINCOLN STREET.  
ELEV. 1291.78 (NAVD88)
- BM #207 - T-POST SET FLUSH WITH THE GROUND IN LINE WITH THE 2ND GUARD RAIL POST FROM THE WEST, ON THE SOUTH SIDE OF A NORTH-SOUTH RCB UNDER E. LINCOLN STREET. ± 6.00' NORTH TO THE SOUTH EDGE OF ASPHALT ON LINCOLN STREET. ± 9.00' NORTHWEST TO THE BASE OF THE SOUTHWEST HAZARD SIGN POST. ± 39.00' EAST NORTHEAST TO THE BASE OF THE SOUTHEAST SIGN POST.  
ELEV. 1283.03 (NAVD88)
- BM #208 - T-POST SET FLUSH WITH THE GROUND EAST OF 159TH STREET EAST, ON THE NORTH LINE OF LINCOLN STREET EXTENDED. ± 43.00' SOUTH TO A MAG NAIL AND SHINER N THE TOP OF THE CORNER FENCE POST. ± 36.50' WEST TO THE BASE OF THE STREET SIGN/CHEVRON SIGN POST. ± 44.00' NORTHWEST TO THE BASE OF THE NORTHERN MOST CHEVRON SIGN POST.  
ELEV. 1289.09 (NAVD88)
- BM #209 - SQUARE CUT ON WEST END OF NORTH HIGH EDGE OF CURB OF NORTH DRIVE TO 726 S. 159TH STREET EAST. ± 14.50' WEST TO CENTERLINE OF 159TH STREET. ± 42.50' SOUTHWEST TO BASE OF SHARP CURVE AHEAD/20MPH SIGN POST. ± 80.50' SOUTH TO BASE OF MAILBOX POST.  
ELEV. 1291.00 (NAVD88)
- BM #210 - X-CUT ON BOLT NEXT TO M IN "MULLER" ON THE NORTH-NORTHWEST SIDE OF FLANGE OF FIRE HYDRANT ON THE WEST SIDE OF 159TH STREET. WEST OF THE POWER POLE AT THE SOUTH END OF THE OVERHEAD ELECTRIC LINE RUNNING ON THE EAST SIDE OF 159TH STREET. ± 4.50' EAST TO THE WEST EDGE OF ASPHALT ON 159TH STREET. ± 49.00' EAST TO THE WEST FACE OF THE POWER POLE AT THE SOUTH END OF THE OVERHEAD POWER LINE.  
ELEV. 1292.86 (NAVD88)

WATERLINE NO. 1				
COORDINATE LIST				
POINT	NORTHING	EASTING	STATION	DESCRIPTION
5000	1,678,579.9364	1,700,963.8818	0+00.00	TEE
5001	1,678,664.9240	1,700,962.4294	0+85.00	HYDRANT
5002	1,679,422.3134	1,700,949.4861	8+42.50	HYDRANT
5003	1,679,935.4458	1,700,940.7170	13+55.70	HYDRANT
5004	1,680,241.0710	1,700,935.4940	16+61.38	TEE
5005	1,680,419.6678	1,700,932.4419	18+40.00	AIR RELEASE
5006	1,680,629.6372	1,700,928.8537	20+50.00	HYDRANT
5007	1,681,179.5569	1,700,919.4559	26+00.00	HYDRANT
5008	1,681,282.3412	1,700,917.6994	27+02.80	BEND
5009	1,681,302.5363	1,702,123.6504	39+08.92	BEND
5010	1,681,311.8989	1,702,145.2246	39+32.44	BEND
5011	1,681,312.0663	1,702,155.2232	39+42.44	BEND
5012	1,681,326.4922	1,702,154.9490	39+56.87	HYDRANT
5013	1,682,194.7054	1,702,138.4456	48+25.24	EXIST. WL

WATERLINE NO. 2				
COORDINATE LIST				
POINT	NORTHING	EASTING	STATION	DESCRIPTION
5004	1,680,241.0710	1,700,935.4940	0+00.00	TEE
5014	1,680,240.9795	1,700,867.4339	0+68.06	BEND
5015	1,680,242.4793	1,700,867.4090	0+69.56	EXIST. WL

CL BROOKHAVEN			
COORDINATE LIST			
POINT	NORTHING	EASTING	STATION
6000	1,678,579.4409	1,700,934.8860	0+00.00
6001	1,681,238.8619	1,700,889.4381	26+59.80

CL LINCOLN			
COORDINATE LIST			
POINT	NORTHING	EASTING	STATION
6001	1,681,238.8619	1,700,889.4381	30+00.00
6002	1,681,260.4166	1,702,176.5771	42+87.42

CL 159TH STREET E			
COORDINATE LIST			
POINT	NORTHING	EASTING	STATION
6002	1,681,260.4166	1,702,176.5771	50+00.00
6003	1,682,260.2360	1,702,157.5730	60+00.00

Sowed: 02-01-2018 4:52:23 PM by: CSI  
 Plot Scale: 1" = 200'  
 U:\Wichita-Civil\2017\170530\000\Main\Drawings\170530-000-003-WATERLINE BUBBLE MAP

	Revision		By	Date
	<b>WATER DISTRIBUTION SYSTEM IMPROVEMENTS</b> <b>16" WATERLINE ALONG 159TH STREET EAST, LINCOLN, AND BROOKHAVEN</b> <b>WATERLINE BUBBLE MAP</b>			
	GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 448-90817			
	PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com			
Designed by	JAG, TBK	Job No.	35-170530-1-42	Sht. 3 of 23
Drawn by	CSL, KTD	Date	May 2017	