

Council Chamber, Ann Arbor, Mich.,  
Feb. 18, 1918. Regular Session.

Meeting called to order by the President. Present: Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey. At this part of the roll call, President Reichert very feelingly addressed Council relative to death of Ald. Isaac Lyman Sherk, and announced the appointment of committee on resolutions as follows: Ald. Sink, Lutz and Markey. Ald. Sink presented the following resolutions, the Council standing during the reading:

#### Resolutions.

To the Honorable, the Common Council, Ann Arbor Michigan: Gentlemen—Since the last meeting of this body, the Angel of Death has again visited us, and has called home one of his faithful servants, Ald. Isaac Lyman Sherk, who, for more than a dozen years, has been a member of this body, as a representative of the Fifth ward. During these years Alderman Sherk has given unsparingly of his time and energy in order that the City in which we live might be made better and greater. Through years of experience, with impartial and ripe judgement, his counsel has always been valuable. Firm and strong in standing for the principles which he believed to be right, he worked untiringly, but was always ready and willing to consider and to listen to the opinions of others and to yield his point whenever new or added information showed that another course of action would be better for the welfare of the community which he loved so well.

Aside from his activities as an officer of our City, he was a man of upright and honorable character, and possessed those splendid personal traits, which caused him to be respected and loved by all who knew him.

In his death, this Council has lost its oldest member in point of years of service, and one whose civic and personal life might well be emulated by others. We who have worked by his side and have known him so intimately, are grieved at his untimely death, and realize fully the loss which the City of Ann Arbor has sustained. However, in our grief, we are not unmindful of the greater grief and sorrow which surrounds his afflicted family, for he was a splendid husband and father.

It is but fitting, therefore, that we

individually and on behalf of the citizens of our city, extend to the sorrowing family our heartfelt sympathy, and with it an expression of sincerest gratitude for the splendid services which he ever rendered, and the devotion with which he performed the duties which devolved upon him.

It is therefore resolved, that these resolutions be made a part of the official proceedings of this body; that they be published in the Times News; and that a copy be sent to the bereft family as a token of love and devotion, and as a permanent memorial of the faithful performance of his many public and private duties.

Respectfully submitted,  
CHARLES A. SINK.  
GEORGE LUTZ.  
J. W. MARKEY.

Roll call was resumed: Present, Ald. Hauser, McGregor, Freeman, Lutz, Sink, Pres. Reichert 14.

Ald. Sink moved the adoption of the resolutions, which were adopted by unanimous vote.

Minutes of previous meeting approved.

#### Communications.

From the Mayor—

Feb. 16, 1918.

To the Honorable, the Common Council: Gentlemen—I hereby announce the appointment of Joe Jedele for special police service at the University, and without pay from the city. Respectfully submitted, Ernst M. Wurster, Mayor.

Ordered on file.

#### From Board of Public Works.

Moved by Mr. Arnet, that we request Council to authorize the Board to purchase in open market one car of paving brick, and one car of cement.

(Council action)

Moved by Ald. Lutz, that request of Board be concurred in.

Adopted by the following vote: Yeas, Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey, Hauser, McGregor, Freeman, Lutz, Sink, Pres. Reichert, 14. Nays, none.

Communication received from Edward N. Hurley, chairman of the United States Shipping Board, announcing plan for immediate organization of U. S. Shipyard Volunteers of the Public Service Reserve, and explaining the necessity for artisans to register, and so engage themselves, when the need develops, to work in

the shipyards at the wages there prevailing. In the meantime they are expected to retain their present positions. "The whole war depends upon ships—ships depend on labor, and labor depends upon the ability of this Board, through an adequate Reserve, to supply the yards."

Mayor Wurster explained the necessity of skilled mechanics to be in readiness to help the government in the shipbuilding program.

**Petitions.**

Petition of Leroy Waterman, et al, asking Council to remit the taxes assessed on the Baptist Guild House, amounting to \$248.68, received.

Rev. J. M. Wells informed Council that up to this time the property was exempt.

Moved by Ald. Markey, that petitions be granted, and the City Clerk draw warrant payable to City Treasurer, for amount of taxes, \$248.68, on the contingent fund.

Adopted by the following vote: Yeas, Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey, Hauser, McGregor, Freeman, Lutz, Sink, Pres. Reichert, 14. Nays, none.

**Committee Reports.  
FINANCIAL REPORT.**

**Fire Fund**

Chas. Andrews, salary .....	\$ 60.50
Eugene Williams, salary .....	46.60
Ralph Edwards, salary .....	46.60
Henry McLaren, salary .....	44.20
Jacob Gwinner, salary .....	44.20
Arthur Clark, salary .....	42.35
Harley Wise, salary .....	42.35
Martin Noll, salary .....	42.35
Geo. Isbell, salary .....	42.35
Frank Markey, salary .....	42.35
Thomas Shamp, salary .....	42.35
Herman Kruse, salary .....	42.35
Emil Dammin, salary .....	42.35
Mat. Heininger, salary .....	42.35
Benj. Zahn, salary .....	42.35
Raymond Gillespie, salary.....	42.35
Henry Maier, salary .....	36.30
Chas. Carroll, salary .....	27.85
Frank Kapp, salary .....	27.85

Fire Fund total salaries ½ month  
February .....\$799.95

**Police Fund**

Thos. O'Brien, salary .....	\$ 55.00
Wm. Aprill, salary .....	42.35
Gustave Mayer .....	42.35
Ed. Blumhardt, salary .....	42.35
Marlend Howard, salary .....	42.35
Emanuel Sodt, salary .....	42.35
Robert Clark .....	42.35
Henry Harden .....	39.30
Fred Sodt, salary .....	39.30
Clyde Bennett, salary .....	39.30
Jacob Andres, salary .....	39.30
Chas. Splitt, salary .....	39.30

Police fund total salaries one-half  
month January .....\$505 60

**Water Works Fund.**

Harry Willsher, salary .....	40.00
Leslie Bush, salary .....	40.00
Robert Rowe, salary .....	37.50
H. Willsher, Jr., salary.....	37.50
Henry Linde, salary .....	35.00
Clarence Brown, salary .....	32.50
John Volland, salary .....	32.50
A. E. Hawkes, salary .....	37.50
Cliff Shetterly, salary .....	50.00
Louise Malloy, salary .....	32.50
Russell Pryce, salary .....	25.00

Total semi-monthly salaries.....\$400.00

**Contingent Fund.**

M. C. Ryan, salary one-half month..\$ 42.35

**Engineer Dept.**

L. G. Bird, services.....	\$ 13.50
Joe Davis, services.....	10.50
Ben DiPhilippi, services.....	.70
F. Leslie Feiner, services.....	48.00
G. W. Francis, services.....	1.35
Henry Keuhn, services.....	10.50
Elsa F. Lutz, services.....	31.34
James Mason, services.....	19.00
W. B. Russell, services.....	15.50
Adam Schlecht, services.....	.75
Clarence Spence, services.....	12.30
E. G. Steinbach, services.....	2.85

Total Engineer Dept. ....\$166.29

The Detroit Edison Co., city hall and clock .....	\$ 27.23
Washtenaw Gas Co., city hall.....	21.37
R. L. Polk & Co., directories.....	60.00
N. R. Smith, M. D., analysis.....	4.00
R. W. Steere, water.....	1.80
Geo. Wahr, supplies.....	7.50
D. F. Woodward, supplies, etc.....	3.45
Fairbanks, Morse & Co., auto truck scales .....	519.33

Total supplies, etc. ....\$644.68

Contingent Fund total including  
salary .....\$853.32

**Water Works Fund.**

Washtenaw Electric Shop, supplies..	\$357.47
The Mayer-Schairer Co., supplies....	.70
Standard Oil Co., supplies.....	9.88
Geo. Wahr, supplies.....	7.65
The Machine Specialty Co., supplies	13.75
Staebler & Co., supplies.....	8.88
C. H. Major & Co., supplies.....	11.00
Flower-Stephens Mfg. Co., supplies.	386.80
J. T. Wing & Co., supplies.....	5.25
Worthington Pump & Machine Corp. supplies .....	12.60
Neptune Meter Co., supplies.....	216.33
Henry S. Platt, supplies.....	25.65
The Detroit Edison Co., supplies....	3.24
H. J. Abbott, supplies.....	10.66
Fred T. McCumber, insurance.....	375.87
Gardner S. Williams, services, final.	739.32
Water Works Dept., expenses.....	12.10

Total supplies, etc. ....\$2,197.15

Harry Warren, labor.....	\$ 37.50
Leo Maples, labor.....	37.50
F. Rhodenbecker, labor.....	6.30
J. Nimz, labor.....	5.40

Total labor .....\$86.70

Water Works Fund total including  
salaries .....\$2,683.85

**Street Lighting.**  
The Detroit Edison Co., light.....\$1,607.67

**Park Fund.**  
W. J. Randel, labor.....\$ 1.39  
E. R. Stoliker, labor..... 15.60  
The Mayer-Schairer Co., supplies... 1.00

Park Fund total.....\$17.99

**Street Fund.**  
L. G. Bird, labor.....\$ 1.50  
Joe Davis, labor..... .60  
Ben DiPhilippi, labor..... .70  
Emanuel Elsasser, labor..... 7.20  
Jno. Hanselman, labor..... 24.00  
Emanuel Holzappel, labor..... 25.60  
Sam. Kalmbach, labor..... 1.78  
Henry Keuhn, labor..... .60  
Matt. Koch, labor..... 6.67  
James Mason, labor..... 13.00  
Adam Schlecht, labor..... .75  
E. G. Steinbach, labor..... 19.65  
Fred'k Ullrich, labor..... 41.50  
Martin Walsh, labor..... 32.90  
Jno. Wendland, labor..... 22.00  
Geo. Zeifle, labor..... 19.38  
Chas. Flewelling, team..... 7.66  
Wm. Grayer, team..... 2.33  
Fred G. Hanselman, team..... 15.33  
Carl Rehberg, team..... 16.33  
Claud Young, team..... 2.33  
Jacob Young, team..... 7.66

Total labor .....\$269.47  
Washtenaw Gas Co., coke.....\$ 33.11  
Wm. J. Clancy, sprinkling..... 78.52  
Water Dept., water for sprinkling.. 155.37  
Edw. Hammond, repairs..... 1.80  
The Michigan Daily, printing..... 2.52

Total sprinkling, etc.....\$271.32

Street Fund total.....\$540.79

#### RECAPITULATION.

Contingent .....\$ 853.32  
Fire ..... 799.99  
Police ..... 505.69  
Water Works ..... 2,683.85  
Street Lighting ..... 1,607.67  
Park ..... 17.99  
Street ..... 540.79

Total City Funds .....\$7,009.17

Ann Arbor, Mich., Feb. 18, 1918.

To the Finance Committee of the Common Council: Gentlemen—I have examined the foregoing accounts against the City of Ann Arbor, and I hereby certify that they are correct to the best of my knowledge.

ISAAC G. REYNOLDS,

City Clerk.

To the Honorable, the Common Council: Gentlemen—Your Finance committee has reviewed the foregoing report. Warrants for salaries were drawn Feb. 16, 1918. We recommend that same be approved and that warrants be ordered drawn for the foregoing accounts.

Geo. Lutz, O. R. Mayer, John McGregor,  
Finance committee.

Ald. Lutz, moved the adoption of the report, which was adopted by the following vote: Yeas, Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey, Hauser, Mc-

Gregor, Freeman, Lutz, Sink, Pres. Reichert, 14. Nays, none.

In the matter of petition of Ben DiPhilippi, asking that assessment against his property for grading of Edward st., be remitted. Ald. Lutz, made oral report that the Finance committee had considered the petition, and recommended that it be not granted.

Ald. Lutz moved adoption of report, which was adopted by unanimous vote.

In the matter of petition of the Star Motor Company, asking that the value of gravel taken from Edward st., be credited on assessments for grading of said street. Ald. Lutz made oral report that the Finance committee had given the matter careful consideration, and recommended that petition be not granted.

Ald. Lutz moved adoption of report, which was adopted by unanimous vote.

#### Special Committee.

Ald. Henderson, chairman of special wood committee, made oral report, that he had taken up the matter of laying in a supply of wood for the coming winter, with the coal dealers, and they preferred not to stock up with wood, so the committee recommended that the city procure supply to be stored at city yards. Committee was given further time.

#### Officers' Reports.

Ann Arbor, Mich., Feb. 18, 1918.

To the Honorable, the Common Council: Gentlemen—I transmit for your further order, valuations in sanitary sewer districts: No. 72, Hamilton, Rose and Sheehan addition; No. 82, Packard st., and Brooklyn ave.; No. 83, Eighth st.; No. 84, Killins' Heights addition.; and No. 85, Eber-White blvd. and Soule blvd., (formerly known as Hiscock blvd.)

Respectfully submitted: H. W. Crippen, City Assessor.

By Ald. Lutz: Resolved that Friday, March 1, 1918, be and the same is fixed as the day, 2 p. m. the hour, and the Council room the place, for the review of the assessment rolls of sanitary sewer districts Nos. 72, 82, 83, 84, 85.

Resolved further, that the City Clerk do advertise the same according to law.

Adopted by the following vote: Yeas, Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey, Hauser, McGregor, Freeman, Lutz, Sink, Pres. Reichert, 14. Nays, none.

## ANNUAL REPORT OF THE WATER WORKS DEPARTMENT

From Feb. 1st, 1917, to Feb. 1st, 1918—

Expense Station 1—		
Salaries and supplies .....		\$ 6,384.76
Expense Station 2—		
Salaries and supplies .....		2,230.98
Fuel, coal, Station 1 .....		2,546.94
Electric power, Station 1 .....		11,443.70
Fuel, coal, Station 2 .....		3,584.83
Office Expense—		
Salaries and Supplies .....		4,153.22
General expense .....		5,758.92
Repair, mains .....		244.71
Repair, service .....		826.45
Repair, meters .....		304.48
Repair, Station 1 .....		566.91
Repair, Station 2 .....		145.69
Refunds .....		504.24
Insurance .....		777.94
Miscellaneous charges .....		1,006.29
<b>Total</b> .....		<b>\$40,480.06</b>
Water Rates, Flat—		
Hydrant, etc. ....		\$60,593.18
Water rates, meter .....		28,591.30
Water, mason work .....		442.69
Tap account .....		3,130.93
Meter rental .....		230.30
Off and On .....		96.25
Miscellaneous charges .....		1,006.29
<b>Total</b> .....		<b>\$94,090.94</b>
Operating expenses .....	\$40,480.06	
Interest on bonds .....	17,940.00	
Interest on extensions .....	3,770.35	
Interest on Depreciation fund .....	627.77	
Depreciation .....	5,572.00—	68,390.18
<b>Net profit</b> .....		<b>\$25,700.76</b>
Value added to Plant, 1917—		
Construction .....	\$ 14,009.09	
Construction, 16" main .....	59,269.14	
Construction, service .....	6,735.41	
Construction, Station 1 .....	7,088.86	
Construction, Station 2 .....	850.71	
New meters .....	1,356.04	
<b>Total</b> .....	\$ 89,309.25	
Less cash received for old iron and brass.....		428.14
<b>Balance</b> .....	\$ 88,881.11	
Value added to plant, 1914 .....	\$ 25,584.87	
Value added to plant, 1915 .....	21,233.28	
Value added to plant, 1916 .....	46,657.34	
Value added to plant, 1917 .....	88,881.11	
<b>Total</b> .....	\$182,356.60	
Original cost .....	\$450,000.00	
<b>Cost of plant, 1918</b> .....	<b>\$632,356.60</b>	
Income—		
1914 .....	\$ 80,489.45	
1915 .....	88,045.44	
1916 .....	95,591.91	
1917, income less on account of reduction in price of sprinkling and curtailment of hours,		94,090.94

Cash on hand in drawer .....	\$ 810.04
Overdraft City Treasurer .....	13,732.71
Total cost of 16" main paid for out of revenue..	95,819.38
Number of Gallons Water Pumped—	
For flat rate consumers, fire purposes and flushing sewers .....	1,165,403,411
Number gallons used through meters.....	280,811,416
Total number gallons pumped .....	1,446,214,827
Number flat rate consumers .....	4,422
Number meters in use .....	432
New meters installed 1917 .....	20
New meters to replace old ones .....	37
New house connections .....	220
Hydrants paid for by city .....	251
Free hydrants .....	30
New hydrants installed, 1917 .....	3

The following are the annual flat rates:

For ordinary household uses for a house of not exceeding four rooms, occupied by one family .....	\$2.50
For each additional room .....	.50
For one bath tub .....	2.50
For each additional bath tub .....	1.00
For one water closet (self-closing) and wash bowl with faucet.....	3.00
For each additional closet .....	1.00
Sprinkling, per season .....	5.00

The following are the meter rates:

Less than 1,000 gallons per day .....	\$ .20 per 1,000
1,000 to 3,000 gallons per day .....	.15 per 1,000
3,000 to 10,000 gallons per day .....	.10 per 1,000

METERS IN USE

Kind Meters	Sizes										Total
	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	5"	6"	
Crown .....	31	42	39	1	5	18	..	5	..	1	142
Trident .....	29	42	15	..	8	28	1	2	..	..	125
Standard .....	..	82	2	..	..	2	2	..	..	..	88
Empire .....	24	1	1	..	1	2	..	1	..	..	30
Union .....	2	1	5	..	..	16	1	..	..	..	25
Enarc .....	..	5	..	..	..	..	..	..	..	..	5
Nilo .....	..	..	..	..	..	3	..	..	..	..	3
Gem .....	..	..	..	..	..	2	3	1	..	..	6
Keystone .....	..	1	..	..	..	..	..	..	..	..	1
Current Sapphire ..	..	1	..	..	..	..	..	..	..	..	1
Hersey .....	..	..	..	..	1	..	..	..	..	..	1
National .....	1	..	..	..	..	..	..	..	..	..	1
Pittsburg .....	..	..	1	..	..	..	..	..	..	..	1
Buffalo .....	..	..	1	..	..	..	..	..	..	..	1
Gammon .....	..	1	..	..	..	..	..	..	..	..	1
Magno Seal .....	..	..	1	..	..	..	..	..	..	..	1
	87	176	65	1	15	71	7	9	..	1	432

WATER MAINS IN ANN ARBOR CITY

	16"	14"	12"	10"	8"	6"	4"	2"	1 1/2"	1 1/4"	1"	3/4"
Jan., 1912 ..	3010	5219	11836	2947	11452	150670	19075	11147	9381	6153	10909	320
1912-1913 ..	596	365	1940	..	..	5546	597	..	..	..	..	..
1914 .....	..	..	4440	1344	..	6648	320	365	440	..	648	..
1915 .....	384	..	..	..	..	9723	..	314	193	146	404	111
1916 .....	..	..	..	..	..	11490	..	205	115	36	91	..
1917 .....	22221	..	504	..	..	7625	..	..	..	56	937	..
	26211	5584	18720	4291	11452	191702	19992	12031	10129	6391	12989	431

CANCELLATION OF WATER BONDS

Issue, \$450,000.00

Year Due	Clerk's No.	No. Bonds	Amount
1920	1-44	44	\$22,000.00
1921	45-90	46	23,000.00

1922	91-138	48	24,000.00
1923	139-188	50	25,000.00
1924	189-240	52	26,000.00
1925	241-294	54	27,000.00
1926	295-350	56	28,000.00
1927	351-410	60	30,000.00
1928	411-472	62	31,000.00
1929	473-538	66	33,000.00
1930	539-606	68	34,000.00
1931	607-676	70	35,000.00
1932	677-748	72	36,000.00
1933	749-822	74	37,000.00
1934	823-864	42	21,000.00
1935	865-900	36	18,000.00

16 yrs. 900 \$450,000.00  
 WATER PUMPED FROM FEB 1st, 1915, TO FEB. 1st, 1916

	Station 1	Station 2	Total	Average Daily Consump.	Est. Daily Aver. Consumption To Each Inhabitant
February	56,934,787	23,052,700	79,987,487	2,856,696	129.08 gal.
March	60,002,318	25,801,765	85,804,083	2,767,873	125.08 gal.
April	59,641,511	24,535,865	84,177,376	2,805,913	127.05 gal.
May	64,418,753	24,900,655	89,319,408	2,881,248	130.90 gal.
June	61,992,773	24,104,199	86,096,972	2,869,808	130.04 gal.
July	64,121,879	24,305,675	88,427,554	2,852,501	158.00 gal.
August	54,987,958	24,928,225	79,916,183	2,577,767	143.02 gal.
September	55,824,213	24,031,275	79,855,488	2,661,852	147.08 gal.
October	65,354,320	24,379,230	89,733,550	2,964,903	134.07 gal.
November	64,059,950	23,598,525	87,658,475	2,921,948	132.08 gal.
December	67,743,867	23,798,640	91,542,507	2,952,977	134.02 gal.
January	72,059,446	23,866,550	95,925,996	3,094,386	140.06 gal.

1,038,445,079

WATER PUMPED FROM FEB. 1st, 1916 TO FEB. 1st, 1917

	Station 1	Station 2	Total	Average Daily Consump.	Est. Daily Aver. Consumption To Each Inhabitant
February	71,783,244	23,281,450	95,064,694	3,395,167	135.80 gal.
March	78,648,051	24,901,050	103,549,101	3,340,293	133.61 gal.
April	74,673,621	24,171,775	98,845,396	3,294,846	131.79 gal.
May	80,942,479	24,997,650	105,940,129	3,417,423	136.69 gal.
June	78,387,714	24,190,505	102,578,219	3,419,273	136.77 gal.
July	94,055,598	25,284,850	119,340,448	3,849,691	213.87 gal.
August	94,076,008	25,351,000	119,427,008	3,852,484	214.02 gal.
September	80,676,897	23,936,850	104,613,747	3,487,124	193.72 gal.
October	89,445,848	24,490,832	113,936,680	3,675,376	147.01 gal.
November	85,848,707	23,410,675	109,259,382	3,641,979	145.67 gal.
December	89,754,852	24,387,375	114,142,227	3,682,007	147.28 gal.
January	93,756,835	24,071,655	117,828,490	3,800,933	152.03 gal.

1,304,525,521

WATER PUMPED FROM FEB. 1st, 1917, TO FEB. 1st, 1918

	Station 1	Station 2	Total	Average Daily Consump.	Est. Daily Aver. Consumption To Each Inhabitant
February	92,342,264	21,444,410	113,786,674	4,063,809	162.55 gal.
March	95,150,672	23,723,600	118,874,272	3,834,653	153.38 gal.
April	87,335,401	22,745,925	110,081,326	3,669,377	146.77 gal.
May	94,937,291	23,572,530	118,509,821	3,822,897	152.91 gal.
June	94,344,021	22,494,400	116,838,421	3,894,614	155.78 gal.
July	93,051,872	23,533,250	116,585,122	3,760,811	208.93 gal.
August	101,568,000	23,638,710	125,206,710	4,038,926	224.32 gal.
September	93,549,451	22,811,225	116,360,676	3,878,689	215.48 gal.
October	102,120,000	23,621,750	125,741,750	4,056,185	162.24 gal.
November	99,360,000	22,728,975	122,088,975	4,069,632	162.78 gal.
December	103,333,000	23,718,030	127,051,030	4,098,420	163.93 gal.

January	111,722,000	23,368,050	135,090,050	4,357,743	174.31 gal.
			1,446,214,827		

The following extensions were made in 1917:

558 feet of 6 inch pipe on John st., from S. Division to S. Fifth ave.  
 453 feet of 6 inch pipe on S. Ashley between Madison and Moseley sts.  
 225 feet of 6 inch pipe on Third st. from Madison st. north.  
 364 feet of 6 inch pipe on Hoover ave. west off Main st.  
 1316 feet of 6 inch pipe on N. Thayer st. from Kingsley to E. Huron st.  
 876 feet of 6 inch pipe on Granger ave. to Ferdon road.  
 390 feet of 6 inch pipe on Packard st. south of Granger ave.  
 262 feet of 6 inch pipe on Eber White boulevard.  
 533 feet of 6 inch pipe on Jackson ave.  
 1850 feet of 6 inch pipe on N. Main st.  
 50 feet of 6 inch pipe on E. Summit, west from N. Fourth ave.  
 275 feet of 6 inch pipe on Hill st. to Berkshire road.  
 22,221 feet of 16 inch pipe from Pumping Station 1 to Church st.  
 504 feet of 12 inch pipe from Seventh st. to Pumping Station 2.  
 56 feet of 1¼ inch pipe on Roosevelt ave.  
 258 feet of 1 inch pipe on W. Jefferson from S. Main st.  
 390 feet of 1 inch pipe on Wright st. off Kellogg st.  
 174 feet of 1 inch pipe on Eighth st.  
 32 feet of 1 inch pipe on Buchholz court.  
 56 feet of 1 inch pipe on Ninth st., between Washington and Huron sts.  
 26 feet 6 inches of 1 inch pipe on N. Ashley from 508 to 512.

By resolution on Nov. 13, 1916, the Common Council of the City of Ann Arbor recommended to the Water Board that they proceed to construct such water mains as they deemed most necessary, from the income of their Department.

The water mains supplying the southeast part of the City were not large enough to give satisfactory service, and the growth of the city to the southeastward has caused a large consumption of water at high levels, with a resulting decrease in pressure, due to the lack of provision to supply the high levels except through the distributing system.

The 12 inch main supplying the reservoir from the Number 1 Pumping Station, was inadequate, and with the growth of the city, the increasing demand for water had to be met from this Station. After a thorough study of the situation, it was decided to construct the 16 inch main from the No. 1 Pumping Station to the Chubb Road Reservoir, connecting to the reservoir and continuing down Chubb Road to Brooks street; south on Brooks street to Miller avenue; west on Miller avenue to Seventh street; south on Seventh street to Washington street, where a 12 inch connection was made to the Washington street Pumping Station; south on Seventh street to Jefferson street; east on Jefferson street to First street; south on First street to Madison street; east on Madison street to Fifth avenue; south on Fifth avenue to Hill street; east on Hill street to Church street, where connections were made to the present 12 inch main leading to the steel reservoir on Medallion street, and also to the 12 inch main running north on Church street. Connections were also made to the 6 inch main at Ingalls street, and a 16 inch Tee was left at State street for future connection of the Steere Farm supply, if desired.

This main is controlled by valves so that water can be pumped at higher pressure if necessary to supply the higher level resident districts in the south and eastern part of the city.

With the two supply mains from the No. 1 Pumping Station, both connecting to the Chubb Road Reservoir, and to the distribution system, makes the probability of the city being shut off because of a break in a supply main very remote.

The pumping equipment at Station 1, when purchased by the city, consisted of a Ludlow-Dunn-Gordon Cross Compound Steam Pump, 3,000,000 gallons maximum daily capacity; a Knowles Tandem Pump, steam driven, of 1,800,000 gallons daily capacity; and a Gordon Tandem Pump, steam driven, of 2,000,000 gallons daily capacity. The two latter pumps were used as auxiliary pumps. The Knowles pump was installed in 1885, and the Gordon pump in 1890. The amount of steam these auxiliary pumps consumed and the general inefficiency when used continuously, caused the replacement of the Gordon pump in 1915, by a DeLaval two stage motor

driven centrifugal pump of the latest type, with a capacity of 3,500,000 gallons daily, against a head of 255 feet.

In 1917, with the construction of the new 16 inch main, the Knowles pump was replaced by an Allis-Chalmers Mfg. Co. two stage motor driven centrifugal pump, of the latest type, with a capacity of 5,000,000 gallons daily, against a head of 256 feet. Therefore, the present pumping equipment of Station No. 1 consists of a 3,000,000 gallon daily capacity Ludlow-Dunn-Gordon cross compound steam driven pump; a 3,500,000 gallon daily capacity DeLaval two stage 10 inch centrifugal pump motor driven, and a 5,000,000 gallon daily capacity Allis-Chalmers Mfg. Co., two stage 10 inch centrifugal pump, motor driven, besides 800,000 gallons daily is being pumped at Station No. 2.

With the installation of the new main, there was installed at No. 1 Pumping Station a Venturi meter in the new 16 inch main, and one purchased but not yet installed for the old twelve inch main. These meters indicate the quantity of water being pumped through them at any time, and register the daily quantity pumped; heretofore it has been necessary to estimate the number of gallons pumped daily, but now the exact quantity pumped is obtained.

The discharge piping from the pumps is arranged so that any one of group of pumps can be connected to either of the discharge mains as desired.

In 1916 a liquid chlorine apparatus was installed to sterilize the water, which has proved so satisfactory that a duplicate apparatus was installed in 1917.

Respectfully submitted: WATER WORKS DEPARTMENT OF THE CITY OF ANN ARBOR, by Geo. S. Vandawarker, Manager.

**City Engineer's Report**

City of Ann Arbor Michigan, Feb. 1, 1918.

To the Board of Public Works, Ann Arbor, Michigan: Sirs—I submit the following report of expenditures for work done under my direction during the month of January, 1918.

Name	Amount	Chargeable to	Amount
Engineering and Clerical—		General .....	\$ 88.38
Manley Osgood .....	\$150.00	Records .....	49.69
G. H. Sandenburgh .....	110.00	Sanitary sewer records for State	
F. L. Feiner .....	108.00	Sanitary Engineer .....	133.82
E. F. Lutz .....	67.83	Broadway bridge .....	75.80
W. B. Russell .....	39.16	Annual Report .....	65.84
E. R. Weeber .....	12.60	Steere Farm survey and estimate...	53.53
E. D. Glatzel .....	5.70	Sanitary sewer maintenance .....	12.81
N. W. Paquette .....	2.85	Cleaning and arranging Engineer's office .....	4.32
		Bids and quotations .....	4.31
		Automobile .....	4.03
		Claius .....	1.72
		Assessor's plats for City .....	1.18
		*Sanitary sewer maintenance.....	.71
<b>Total .....</b>	<b>\$496.14</b>	<b>Total .....</b>	<b>\$496.14</b>
Sewer Work—		Sanitary sewer maintenance .....	\$ 23.58
Julius Loehrke .....	\$ 80.00	Storm sewer maintenance .....	1.81
St. Com. Roll .....	25.33	Sanitary sewer records for State	
		Sanitary Engineer .....	1.10
		Cleaning City yard and shed .....	2.67
		Sickness .....	76.47
<b>Total .....</b>	<b>\$105.33</b>	<b>Total .....</b>	<b>\$105.33</b>

Total expenditures—\$601.47.

\*Recharged to Eddy & Son.

Respectfully submitted: MANLEY OSGOOD, City Engineer.

**Street Commissioner's Report.**

Ann Arbor, Mich., Feb. 4, 1918.

Hon. Board of Public Works, Andrew Reule, President: Gentlemen—The following is a report of the work done by the Street Department during the month of January, 1918.

1-3-16; 17-30; Taking care of snow: Cleaning snow from crosswalks, gutters, etc., labor, .....

Plowing snow from gutters .....	162.84
Hauling snow from streets, .....	591.28
Plowing snow from sidewalks .....	214.63
Plowing streets to City and Catholic cemeteries .....	3.54
<b>Total .....</b>	<b>\$1,454.27</b>
Miscellaneous work and repairs, labor .....	\$ 65.70
(Watchman Broadway bridge, \$57.50;	



night watchman Broadway bridge, \$5.50; taking ashes from city hall basement, \$1.50; clearing stand pipe pit Main and Ann st., \$1.20)

Total .....\$1,520.07  
Respectfully submitted: A. J. Paul, Street Commissioner.

Annual report of the Water Works Dept., and reports of City Engineer, Street Commissioner and Acting Marshal, for month of January, received and ordered to take usual course.

Mr. John Shadford, Poor Commissioner, explained to Council the necessity of rebuilding city coal sheds, and the matter was referred to the Poor committee.

By Ald. Huss: Resolved, that Dr. John F. Blinn be and is hereby appointed City Physician for the year beginning the first Monday in March, 1918, at a salary of \$25.00 per month.

Adopted by the following vote: Yeas, Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey, Hauser, McGregor, Freeman, Lutz, Sink, Pres. Reichert, 14. Nays, none.

By Ald. Hauser: Resolved, that John H. Shadford be and is hereby appointed Poor Commissioner for the year beginning the first Monday in

March, 1918, at a salary of \$35.00 per month.

Adopted by the following vote: Yeas, Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey, Hauser, McGregor, Freeman, Lutz, Sink, Pres. Reichert, 14. Nays, none.

Ald. Lutz suggested that the special wood committee confer with Mr. Shadford relative to wood necessary for city poor.

Mayor Wurster called attention of Council to matter of sewer backing up at Ann Arbor Abattoir Company's property.

City Engineer Osgood read a communication from the Abattoir Company, relative to the same.

Moved by Ald. Lutz that the matter be referred to City Engineer and City Attorney, with power to act.

Adopted by the following vote: Yeas, Ald. Heusel, Sugden, Mayer, Huss, Andres, Henderson, Donnelly, Markey, Hauser, McGregor, Freeman, Lutz, Sink, Pres. Reichert, 14. Nays, none.

On motion of Ald. Lutz, Council adjourned.

ISAAC G. REYNOLDS,  
City Clerk.