

Regular Meeting, City Council of Canby-Oregon

February 1-1926

Council called to order at 8 o'clock P.M. by Mayor Bair.

Upon roll called there were present, Mayor W. H. Bair, City Attorney C.N.Wait, Recorder C.L.Eid, Chief of Police Louis Lent, Councilmen, Bowlsby, Dedman, Evans, Patch, Shewey, Swanby, Wang and White.

The minutes of the last regular meeting, and special meetings of January 21 and January 28 were read and approved.

Whereupon a communication addressed to Mayor Bair signed by H. C. Jones relative to his inspection of the water tank and tower was read, and is made a part of the records of this meeting.

Portland Jan 30-1926

Hon W.H.Bair.
Mayor, City of Canby.
Canby Oregon

Dear Sir:-

Referring to the matter of the City Water Tank.

I recently made an inspection of this tank and tower, and found that the tower was badly out of plumb and was twisting around. This tower was not properly braced when constructed.

I also found the tower too small at the top and the caps have sprung and raised the bottom of the tank to almost the breaking point. The tank is also showing signs of decay and has been patched up in several places. I was advised that considerable money had been expended on repairs and as it would require approximately \$1500.00 to \$2000.00 to place this tank in fair condition to carry it along for 2 or 3 years, at which time it would be necessary to entirely renew it.

My recommendations are that rather than make this expenditure for repairs, that the tank and tower be replaced with a standard steel tank on steel tower. I feel that this will be the most economical and the most satisfactory manner in which to handle the proposition.

Yours Truly

H.C. Jones
Inspector

Dict.

Whereupon the following claims against the City were presented:

General Fund.		Electric Lt. Fund	
Louis Lent	\$ 20.64	Louis Lent	\$ 75.00
W. S. Maple	15.00	State Ind. Acc.Com.	3.78
C.N.Wait	8.00	Louis Lent 5% Coll.	43.97
C.L.Eid	15.66	A.W.Faulkner	29.60
Southern Pacific Co.	1.00	S.W.Bany	4.00
A.W.Faulkner	.40	Canby Hdw. & Impl. Co.	121.52
City of Canby E.L.Fund	50.00	Canby Herald	4.00
Lent Bros.	1.10	Ezra Hurst	1.05
	-----	Molalla Electric Co.	283.72
Total	\$ 111.80		-----
		Total	\$ 566.64

Water Fund		Road Fund	
Louis Lent	50.00	Wm. Beeson	6.00
State Ind. Acc. Com.	1.00	I.V.Bany	6.00
Louis Lent 5% colls.	20.98	Chester Peterson	9.60
Daily Journal of Com.	21.35	Aug. Rothenberg	6.00
Canby Hdw. & Imp. Co.	18.80	S.W.Bany	12.00
First Nat. Bank due 3/1	90.00 ^{out}	D.R.Dimick	6.00
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Total	\$ 202.24	Total	\$ 45.60

It was moved, seconded and carried that the above bills be allowed as read. Roll call, Ayes 8 Nos 0.

Reports of officers and committees.

Mr. Lent reported on the matter of securing power direct from the P.R.R. L. & P. Co. from the North, to the effect that there was no possibility of such an arrangement at the present time, and that we were now getting as cheap rates as we probably would under such service if it could be arranged.

He also recommended that the City purchase a voltameter.

Mr. Wang, Chairman of the Committee on Fire and Water then presented the reports of W. S. Turner on the condition of the present tank and tower, and comparisons of bids for new structures.

These reports follow as part of the records of this meeting:

REPORT ON PRESENT WATER TANK AND TOWER
BY
WM. S. TURNER, CONSULTING ENGINEER.

The Honorable Mayor and City Council
City of Canby
Canby, Oregon.

Gentlemen:

In accordance with your request, I have made a careful examination of the old wooden water tank of 75000 gallons capacity on 75' wooden tower, belonging to the City of Canby, and beg to report as follows:

This water tank was built about 10 years ago, the tower originally consisting of 12 posts each 12" x 12". Some two or three years ago it was felt necessary to strengthen the tower, and 4 additional posts of the same size were added at the four corners of the structure.

My examination shows the following:

1. The tower structure as a whole is badly twisted, the tops of the posts having moved approximately from one to two feet from their original positions, throwing the balcony on which the tank rests out of line and level, and causing excessive strains on many parts of the tower.
2. Foundations have settled unevenly, resulting in additional excessive strains in the members of the tower, and probably accounting in part for the twisting of the structure.
3. The posts are considerably bent, some of them bowing very badly on the vertical side, showing undue strain.
4. The bases of some of the posts are rotted and crushing. The posts are also checked and split in places, sufficiently to materially weaken the structure.
5. Decay in the posts shows also in other places, as the bracing joints, some of which are forced into the posts on account of rotting, and at the bolts where bolt heads and washers are sunk deeply into the wood.
6. The braces are some of them loose at the joints, and others are badly bent showing excessive strain.
7. The riser pipe is bent out of line and has forced the bottom of the tank up several inches, so that leakage results. There are no expansion joints in this riser, which would account for some bending of the pipe, but not more than one inch, the additional lengthening and forcing up of the floor of the tank being due to settlement of the tower.
8. Repairs in the posts have already been made in numerous places; namely, at the base and at other points higher up where decay has already occurred, indicating that decay has been in progress in the structure for some time.
9. The water tank has been subject to leakage at different times on account of disturbances set up by changes in the tower and riser pipe, but at the present time appears to be reasonably tight.
10. The top of the tower moves several inches when filled with water, from the position, when empty.

My examination of the tower, the results of which are detailed above, indicate that it is not in a safe condition, and is in danger of falling at any time under undue strain of wind pressure or weight of water when full. The repair of the tower so as to put it in a safe and useable condition for any length of time does not appear to be feasible at a reasonable expense, considering the age and condition of the structure. The average safe life of such a tower being from 12 to 15 years, it could not be made to last much longer in any event.

Respectfully submitted,

Wm. S. Turner.

The Honorable Mayor and City Council
City of Canby
Canby, Oregon.

Gentlemen:

REPORT ON BIDS FOR WATER TANK

In accordance with your recent request, I have made an examination and comparison of bids received on January 20th, 1926, in accordance with public advertisement, for the construction of a steel water tank and tower of 100,000 capacity. Other alternatives called for in your advertisement; viz. wooden tanks and towers, were eliminated at your request.

Three bids were submitted to me for study and comparison as follows:

Bid #1	King Bros. Boiler Works	\$ 6190.00
Bid #2	Pittsburgh-Des Moines Steel Company	7125.00
Bid #3	Chicago Bridge & Iron Co.	7600.00

A comparison of these bids shows that the specifications upon which the prices were based are very different, and that therefore, certain allowances would have to be made in arriving at a fair comparison of prices.

A brief examination shows that Bid #3, the specifications of which are very similar, and the reliability about equal to Bid #2, is much higher in price. The difference in favor of #2 is \$ 475.00 to which must be added the riser pipe or \$ 300.00 and the indicator at \$ 75.00, making a total of \$ 850.00.

A detailed comparison of Bid #3 was therefore not made.

A comparison in considerable detail was made between Bids # 1 and #2, a copy of which is attached hereto. This shows wherein the specifications for the work which they agreed to do differed, and where allowance must be made in price for such difference.

In favor of Bid #2 these differences may be briefly summarized as follows:

- Item 1 No specifications accompanied Bid #1, as called for in advertisement, except a drawing showing the general dimensions of the tank and tower. Bid #2 furnished complete specifications.
- Item 2 The height of the tower of Bid #1 is 66 $\frac{1}{2}$ ' to the bottom of the hemisphere, whereas Bid #2 is 75' to the bottom of the hemisphere, a difference in height of 8' 6", Bid #2 being in accordance with your advertisement, elevating the entire capacity of the tank above 75' above the ground.
- Item 3 No column bases were specified by Bid #1 but are furnished by Bid #2.
- Item 4 No riser rods from tower to riser pipe are specified by Bid #1 but are furnished by Bid #2.
- Item 5 No anchor rods are specified by Bid #1 but are furnished by Bid #2.
- Item 6 A revolving ladder, which is desirable at side and top of tank, is not furnished by Bid #1, but is by Bid #2.
- Item 7 Painting is not specified by Bid #1, but two coats are by Bid #2.

DETAILED COMPARISON OF BIDS100,000 Gallon Steel Water Tank on 75' Tower

#2

Pittsburgh & Des Moines

#1

King Boiler Works

Plans & Specifications:	Complete Specifications and plans except shop plans.	Few Specifications and outline plan.
Strength & Stability:	Designed for weight of water Designed for weight of structure Designed for 100 mile wind pressure.	No Specifications
Quantity of Material:	"Tank" Plates for Tank "Bridge Steel for Tower 55000 to 65,000# (standard)	No Specification
Roof Plates:	Suitable grade	No Specification
Rivets	"Rivet Steel" (Stan.)	No Specification
Tower Rods	"Rivet Steel" 1-1/16"	1"--Quality not Specified
Tank-Size & Capacity	24' - 0" Diameter 22' - 6 3/8 height cylinder 8' - 6" Depth Hemi. 103,300 Gallons	24' - 0" Diameter 28' - 0" Height 11' - 0" Depth Hemi. 100,000 Gallons
Tank		
Roof	1/8" plates with final, manholes & covers	3/16" plate with final manholes & covers
Riveting	Horizontal joints single lap Vertical joints (stan)	No Specification
Tank Plates	40% of plate 5/16" thick	All tank plates 1/4" thick
Post connections	No detail- standard	No Specifications
Balcony	24" Steel plate girder railing--trussed steel no detail	30" Steel Platform with railing no detail
Tower:		
Height & size of columns	4--83'-6" to bottom of cylinder Each 2--15"; 33.9# channels, laced, no details-proper	4--75'-0" to bottom of cylinder Each 2--15"; 40# channels, laced no details
Column Splices	No details--Proper	No Specifications
Column Bases	Steel Plates & Angles	No Specifications
Sway Rods	Turnbuckles upset	Turnbuckles
Pins & Plates	Ample size & strength	No Specifications
Riser Rods	To Riser Pipe- no details	No Specifications
Anchor Rods	Furnished- proper size	No Specifications
Column Joints	Milled Bearing	No Specifications

- Item 8 A steel channel target and float are furnished by Bid #2 but are not by Bid #1.
- Item 9 Riser pipe of Bid #1 is 8' 6" shorter than Bid #2, owing to height of tower.
- Item 10 Foundation plans are not furnished by Bid #1, but are by Bid #2.
- Item 11 Overflow is not specified by Bid #1, but is furnished by Bid #2.
- Item 12 No guarantee is furnished by Bid #1, but one year guarantee is specified by Bid #2, which is usual for such work.
- Item 13 The tank capacity of Bid #2 is 103,300 or 3.3% more than Bid #1.

Points in favor of Bid #1

- Item 1 Roof of tank of Bid #1 is 3/16" and of Bid #2 1/8".
- Item 2 The weight of columns of tower of Bid #1 is 40# per foot, whereas that of Bid #2 is 33.9#.
- Item 3 The riser pipe of Bid #1 is 10" cast iron, while that of Bid #2 is 8" cast iron.
- Item 4 Frost casing is furnished by Bid #1 but with no specifications, while it is not by Bid #2.

A fair estimate of the cost of the above differences indicates that the balance in favor of Bid #1 is \$ 700.00, which if added to the face of Bid #1; namely \$ 6190.00, would bring the price, on the basis of specifications of Bid #2, which covers very closely the work you want done, to the sum of \$ 6890.00 as compared with \$ 7125.00 for Bid #2.

While there is still considerable difference between the Bids #1 and #2, on the above basis there are certain other considerations which must be taken into account. Bidder #2 is an old and very reliable concern, and has had a great deal of experience in building structures of this kind, and has installed many in this vicinity. There would be no question of the City getting full value for the work done by them. Bidder #1 has not done a large amount of work of this kind.

Comparison with Bid #3, by a similar concern on substantially the same specification, shows that Bid #2 is very low for the character of the work which they propose to install.

In addition Bidder #2 carries in stock at the factory, water tanks and towers of the type which they are proposing to furnish, which will enable them to guarantee early delivery and erection. They also have in this territory gangs of experienced erectors who can be placed on the work as soon as the materials arrive.

In view of all of the above, the writer is of the opinion that Bid #2 compares more closely with your advertisement, is the best and most responsible of the bids referred to him, and recommends the acceptance of the same by the City.

Respectfully submitted,

Wm. S. Turner.

	#2	#1
Punching & Riveting	Specified	Not Specified
Forming tank Plates	Cold Rolled no heating or pounding	No Specifications
Scarfin g	Carefully scarfed	No Specifications
Calking	All seams calked no filling in laps	No Specifications
Ladders:		
Rigid Ladders	Lace bar ladder to base of sphere Round bar ladder to balcony Round bar ladder to top of tank Round bar ladder to inside bottom	Lace ladder to balcony Round bar ladder to top Round bar ladder to bottom
Revolving Ladder	Furnished --instead of outside ladder to top	No Specification
Walkway to Riser	Not Furnished	Not Furnished
Painting	Two coats	No Specifications
Indicator	Steel channel & target and float	No Specification
Expansion Joint	for 8" riser pipe	for 10" riser pipe
Riser pipe	8" CL or steel	10" Cast Iron pipe
Frost casing	Not furnished	Furnished--no detail
Large Riser Pipe	Not furnished	Not furnished
Delivery of material	Within 2 mi. Ry. Sta.	At Canby
Foundation Plans	Furnished	Not furnished
Plans & Specifications	Furnished-no details	Not furnished
Testing	Purchaser furnish water	Not Specified
Foundations	By purchaser specifications accompanying	By purchaser no specifications accompanying
Overflow	Furnished	Not furnished
Guarantee	1 year	None

Representatives from King Bros. Boiler Works and the Pittsburgh Des Moines Steel Company being present then addressed the Council relative to their respective bids.

Whereupon it was moved and seconded that the bid of the Pittsburgh, Des Moines Steel Company for new steel water tank and tower be accepted.

Roll Call

Ayes - Bowlsby-Evans-Patch-Shewey-Swanby-Wang-White. (7)
Nos - Dedman (1)

Whereupon the Mayor declared the contract awarded to the above named Company.

Whereupon the resignation of C.L. Eid as Recorder was presented to the Council, and on motion, seconded and carried was accepted with regrets.

Whereupon the resignation of H. B. Evans as Councilman was presented, and on motion, seconded and carried was accepted.

On motion of Councilman Bowlsby, seconded by Patch, and carried H. B. Evans was appointed Recorder.

On motion of G. W. White, seconded by H. A. Dedman, and carried, Mr. H.A.W. Graham was elected as Councilman to fill out the term of H. B. Evans, resigned.

Whereupon the Mayor instructed the Committee on Streets and Public Property to purchase a drag for the use of the Street Superintendent.

Whereupon it was moved, seconded and carried that all rejected bids on the water tank and tower be returned to respective bidders.

Whereupon it was moved and seconded that the Council adjourn until Wednesday, February 3 at 8 o'clock, P.M. Motion carried.

Approved, March 1-1926

J. H. Bair

Mayor.

H. B. Evans
Recorder