

# Heber Public Utility District

## REPORT TO BOARD OF DIRECTORS

**MEETING DATE:** September 15, 2022

**FROM:** Laura Fischer, General Manager

**SUBJECT:** Authorize the Installation of a Flow Meter at the Water Treatment Plant and Modify the Reserve Resolution 2022-16 to Include an additional \$90,000 in the Water Fund Expenditures for 2022-23.

**ISSUE:**

Shall the Board of Directors Authorize the Installation of a Flow Meter at the Water Treatment Plant and Modify the Reserve Resolution 2022-16 to Include an additional \$90,000 in the Water Fund Expenditures for 2022-23.

**GENERAL MANAGER'S RECOMMENDATION:**

It is recommended that the Board Authorize the Installation of a Flow Meter at the Water Treatment Plant and Modify the Reserve Resolution 2022-16 to Include an additional \$90,000 in the Water Fund Expenditures for 2022-23.

**FISCAL IMPACT:**

The total cost for the flow meter project is \$90,000.

The project is funded by the Heber PUD Water Fund and the Engineer's Probable Cost Estimate is attached for your consideration.

**DISCUSSION:**

The flow meter at the Water Treatment plant is not reading accurately during low flows. This has caused the district to not meter the water we produce as it enters the distribution system. To accurately measure the water production, we need to replace the meter. Staff and our engineers have determined that the best solution is to install a new flow meter downstream of the distribution pumps. Please see the diagram attached along with the engineer's opinion of probable cost.

**CONCLUSION:**

As it is vital for our water plant to accurately meter the water production and distribution and as our engineer's and staff have determined that it is the best option to install a new flow meter downstream of our pumps. The engineer's probable cost estimate is \$81,750.00, which does not include a contingency. The total amount of \$90,000 will be included in the adoption of Resolution 2022-16 in agenda item 8.F.

Respectfully Submitted,

Laura Fischer, General Manager

Engineer's Report  
Staff Diagram



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PROJECT:  
 HEBER PUBLIC UTILITY DISTRICT  
 WATER TREATMENT PLANT DISTRIBUTION FLOWMETER PROJECT  
 THG PROJECT NO. 744.001

DATE: AUGUST 26, 2022

**MAGNETIC FLOWMETER DOWNSTREAM OF DISTRIBUTION PUMP STATION**

**ENGINEER'S OPINION OF PROBABLE COST**

<u>Item No</u>	<u>Item</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Total Cost</u>
1	MOBILIZATION	EACH	\$3,000	1	\$3,000
2	REMOVE 12-INCH DIAMETER PIPING	EACH	\$3,000	1	\$3,000
3	INSTALL NEW 12-INCH DIAMETERS SPOOL TYPE MAGNETIC FLOWMETER, WITH ELECTRICAL AND CONTROL WIRING	EACH	\$16,000	1	\$16,000
4	INSTALL NEW 12-INCH DIAMETER PIPING WITH FITTINGS	EACH	\$14,000	1	\$14,000
5	INSTALL BYPASS 12-INCH DIAMETER PIPING AND VALVES	EACH	\$35,000	1	\$35,000
6	ELECTRICAL AND CONTROL INTEGRATION	EACH	\$4,000	1	\$4,000
7	BYPASS PUMPING DURING CONSTRUCTION. TO BE CONDUCTED BY WTP OPERATORS	EACH	\$2,000	1	\$2,000

**ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST** **\$75,000.00**

**ENGINEERING DESIGN: PREPARATION OF DESIGN DOCUMENTS AND BIDDING DOCUMENTS - 4 %.** \$3,000

**BIDDING SERVICES: PROPOSAL SERVICES TO ATTAIN CONTRACTOR - 4 %** \$750.00

**CONSTRUCTION MANAGEMENT: RESIDENT ENGINEERING AND INSPECTION OF WORK - 4%** \$3,000.00

**TOTAL ENGINEERS OPINION OF PROBABLE PROJECT COST** **\$81,750.00**

# Water Distribution Mag Meter Project

## Material Needed

Qty	Description	Cost
1	Mag Meter.....	
4	Gate Valves.....	
3	Spools w/ welded flanges .....	
2	Tees.....	
2	90 degree elbows.....	
14	Set of SS Bolts and Nuts.....	
14	Gaskets.....	
2	Ball Valves.....	
2	Saddles or welded ports for ball valves.....	
4	Pipe Supports .....	

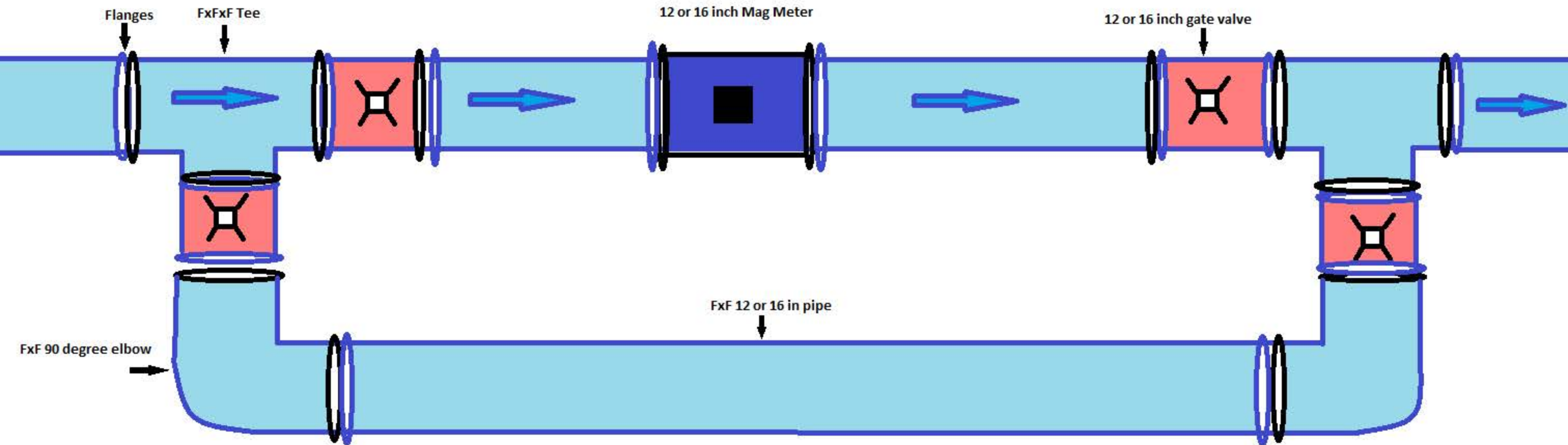
## Note:

\* 12 inch mag meter will read more accurately and material cost will be less. Down side is that distribution pumps make the pipes vibrate and may interfere with flow reading. Additionally, the space may be limited to install mag meter at an appropriate distance from 90 degree elbows.

\*16 inch mag meter will read less accurately with low flows and parts are more expensive. Upside is we thing there is enough straight pipe to install the mag meter with no interference.

\* Alternative is to reduce the suction side pipe to a 12 inch if there is no adverse affect to the pumps and pumps flows.

\* By pass can be smaller size, saving on overall cost



Two 2" valves will be needed at the by pass one to remove air and one to drain pipe when not in use.