

WATER TOWER EXPERTS

• 1610 N. Minnesota Ave Sioux Falls, SD 57104

(605) 334-9749

February 23, 2021

JOHNSTOWN COLORADO 750MG GST - ROOF REPLACEMENT (REV. 1) *SELF-SUPPORTED STEEL DOME OPTION*

Maguire Iron is pleased to provide the following pricing for the roof replacement of the south tank at the Johnstown Treatment Plant with a self-supported steel dome roof.

ROOF REMOVE REPLACE - Remove old roof replace with a Self-Supported Steel Dome Roof - \$300,000.00

ADDER #1 – Blast and paint interior and exterior of new roof and top three to five feet interior/exterior sidewall (transition)...... - \$48,800.00
*After painting and curing schedule is complete, interior wet surfaces are to be disinfected per AWWA method 3
Filling of Tank and BAC-T testing by others

ADDER #2 - Blast & paint sidewall, floor, internal piping, roof of tank interior, roof exterior and three to five feet of exterior (transition)...... - \$138,200.00

*After painting and curing schedule is complete, interior wet surfaces are to be disinfected per AWWA method 3
Filling of Tank and BAC-T testing by others

SELF-SUPPORTED STEEL DOME:

- Design, provide all materials, shop fabricate, assemble on site new roof structure (self-supporting 50 ft.
 diameter domed roof) with standard appurtenances to include railing / walkway to roof apex similar to north
 tank (reusing existing vent)
- Final drawings and engineering calculations to included CO P.E. stamp
- Prep tank for removal of old roof structure (and center support column)
- Removal and disposal of old roof structure to include site clean-up
- Crane rental, other equipment, miscellaneous
- Mobilization
- Estimated time needed to complete project (six to eight weeks from mobilization depending on ADDER(s) selected)
 - *All work to be performed in a workman like safe manner.
 - *Price includes some stoppage of work given the tank location
 - *Price assumes paved area south of tank can be utilized as staging, fabricating, prepping area
 - *Tank to be drained and ready for crews prior to arrival
 - *Price assumes the self-contained meter reader assembly on the tank will be relocated to the north tank prior to crew arrival



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SELF-SUPPORTED STEEL DOME / SCHEDULE, AVAILABILITY, WARRANTY

Approval drawing submittal: 2 to 3 weeks after order placement

Owner Submittal Approvals: 1 to 2 weeks

Dispatch from factory: 8 to 10 weeks after receipt of all approved drawings and details

* MAGUIRE IRON warrants the new roof against defects in workmanship and materials under normal and proper use and operating conditions for a period of 60 months from date of installation, paint for 2 years.

CONTRACT: Formal contract will be drafted around selections made by Owner for final acceptance.

*No deposit required

DISCLAIMER: Condition of the tank sidewall where support rafters connect unknown at this time. If it is determined that addition work is required to ensure integrity of new roof to tank connection or Owner request additional work as a result of findings any resulting associated costs will be negotiated at that time and approved prior work commencement.

SUMMARY:

Upon review of the shared documents, it is Maguire Irons opinion and experience from previous like projects to propose on the "Self-Supporting Dome" as the most cost-effective solution and in the best interest of the Town of Johnstown. Given the degree of deterioration of the existing "rafter supported roof" with many uncoatable areas it would be more costly to stabilize the roof to insure safe access for the crews to the tank interior. Further expense incurred to rig the interior to remove old supporting members and replace most likely "all" members and possibly additional associated structural needs once inside.

Our discussions in recent months with Mr. Maurice Pribble provided us with important insights, Maurice indicated the function of the tank being as "chlorine contact time" further supports the recommendation to go with the self-supported dome style of roof.

Contact time tanks function at higher concentrations of chlorine adding to the harsh environment of the tank vapor zone, or dead air space above the water level. Higher concentrations than what would be considered in a finish water tank. A dome style roof provides a "smooth" interior surface and with the rise promotes drafting allowing for the chlorine gas vapors to more efficiently escape through the tanks venting system.

The existing style of roof, being much flatter, along with compartments created by the internal support members greatly reduces the effectiveness of the chlorine vapors to escape and they become trapped within the confines of the support members accelerating corrosion within the vapor zone. Not to mention the uncoatable areas where you see the severe corrosion to the rafters at the center of the tank.

In closing we at Maguire Iron would like to thank you for the opportunity to propose on your project. As the industry leader in new water storage tanks and tank maintenance, we understand the importance of taking care of one of your most critical pieces of infrastructure.



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Best regards, Chuck Graber & Team Maguire



CHUCK GRABER
WATER TOWER EXPERT

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Providing professional services, turnkey tank services, construction and expertise since 1915.