

**Metropolitan Domestic Water Improvement District
Board of Directors Meeting**

January 9, 2017

Approval of Composite Manhole Cover Replacements

Synopsis

The Board is being requested to approve the replacement of 20 existing composite manhole covers with hinged ductile iron manhole covers.

Background

The District has pressure reducing valves in underground vaults that have a traditional manhole style entry. These vaults were constructed using 32" diameter cast iron manhole covers that can weigh up to 250 pounds. District staff needs to access these vaults and remove the covers on a regular basis to maintain the pressure reducing valves and other infrastructure. The weight of the covers can contribute to staff injuries.

In an effort to eliminate injuries, the District purchased 20 composite manhole covers to replace the cast iron covers around 2009. The composite covers are lighter, making them easier for staff to remove and also have a locking feature to prevent unauthorized access. The composite covers had the appropriate load rating for traffic; however, none of the 20 composite covers purchased by the District were installed in traffic areas.

Issues

McGard LLC, the distributor of the composite covers the District purchased, issued a recall of the manhole covers due to two failures in high traffic areas. The recall allows for the replacement of the composite lids with new traditional cast iron lids, paid for by McGard LLC. The concern staff has with this solution is it sets the District back to where it was before the purchase of the composite lids. The same safety and security issues would exist. After negotiations with McGard, it was agreed that they would send a check for \$5,995.50, which is the value of the replacement cast iron manhole covers they are offering as part of the recall. This offer is approximately \$5,745.50 less than what the District spent on the composite lids; however, the costs of staff time and legal expenses would increase the cost to the District in an attempt to recover this amount.

The solution staff has come up with is to utilize the funds received from McGard to purchase hinged ductile iron covers, rather than cast iron covers. The District has used hinged ductile iron covers before and they work very well. The hinged aspect reduces the potential for injuries and ductile iron is lighter than traditional cast iron. The manhole covers can be equipped with a locking mechanism for added security. The covers are also load rated for traffic installations.

Staff obtained three quotes from distributors of hinged manhole covers. Border Marketing was the low bidder at \$588.29 each plus tax and shipping. Fancom Pipe and Supply's price is \$638.00 plus tax and shipping, and Jim Cox Sales, Inc. submitted \$605.00 each plus tax and shipping. The total cost from the low bidder, Border Marketing, for 20 manhole covers including taxes and shipping would be \$13,196.60. Staff has found four hinged covers that were reclaimed from road projects and site modifications that can be used. This will reduce the order to 16 covers, saving \$2,543.76.

The manhole covers would be replaced by District staff. There will be additional materials and permits required. The additional materials would include concrete and manhole adjusting rings to set the appropriate grade. Although the manholes are not in traffic, some of them do fall in the Pima County right-of-way which will require permits at a cost of \$3,135.00. The additional materials needed are estimated at \$150.00 per installation. The cost of locks were not requested in the quotes and those would run approximately \$45.00 each, or \$900.00, which can come from the security budget.

The estimated project total including material purchases, permits, and locks would be \$20,276.60. Subtracting the savings from the four existing covers of \$2,543.76 and the \$5,995.50 received from McGard LLC, the District costs applied to the project would be \$11,737.34. All the purchases are below the General Manager's authorization in the Procurement Policy.

Staff Recommendation

This item is for the Board's information and staff is available to answer any questions. No motion is necessary on this item unless the Board deems otherwise.

Respectfully submitted,

Steven D. Shepard
Utility Superintendent

I concur with the above-noted recommendation.

Respectfully submitted,

Joseph Olsen, P.E.
General Manager