

MINUTES OF WORKSHOP MEETING
BOARD OF DIRECTORS
LAGUNA MADRE WATER DISTRICT

The **WORKSHOP MEETING** of the **LAGUNA MADRE WATER DISTRICT** was held at the Administration Office of the District, 105 Port Road, Port Isabel, Texas on the **14th day of October 2009** at the hour of **5:00 p.m.** pursuant to written notice as prescribed by law.

ITEM#1 **QUORUM**

The **CHAIRMAN** called the **WORKSHOP MEETING** to order at **9:00 a.m.** and he determined the Notice of the Workshop had been duly posted in accordance with the law and the following present constituted a quorum:

Present: Scott Friedman, Chairman
 Jeff Keplinger, Director
 R. Kevin Tenison, Director
Absent: Rudy H. Garcia, Director
 Albert Barberena, Director

L.M.W.D.: Gavino Sotelo, General Manager; Arturo Martinez, Director of Operations; Pete Capistran, Director of Finance; Maribel Hinojosa, Asst to the General Manager.

ITEM#2 **PLEDGE OF ALLEGIANCE**

The **CHAIRMAN** stated for everyone to recite the Pledge of Allegiance.

ITEM#1 **DISCUSS CAPITAL WATER AND WASTEWATER NEEDS**
AND POSSIBLE BOND ISSUES

MR. SOTELO began by saying that staff had reviewed projects that were recommended by the Asset Management Plan from last year but had not made decisions on what should be addressed with the first bond issue other than the micro-filtration work at the desal plant. He also mentioned that he had discussed with the financial advisors the possibility of completing projects under the present rate structures. He said that the financial advisors said the **DISTRICT** could afford up to a \$17 million bond issue based on the current rate and that would give the coverage of \$1.46 which was more than needed for requirements. He also said that he had asked them to look at a GO bond issue based on the current tax rate and they came back and said that the **DISTRICT** could afford up to \$27 million without a tax increase and would allow us to decrease the property taxes. He indicated again that it would be \$17 million on the revenue side and \$27.3 on the GO side and nothing would change. **MR. TENISON** asked again if the rate would not change on the tax rate or the rate on the customer rate per gallon. **MR. SOTELO** stated that was correct. He explained said that he had asked the advisor look at the maximum on the revenue side under the rate we had thru August since we had increased the rate by about 7% average which was not taken into consideration. **MR. KEPLINGER** asked which revenue figures they had used as far as sales of water and **MR. SOTELO** responded that they usually go back five years. He also mentioned that the \$17 million would eliminate any of the Capital Improvements Fund in the budget. He also asked the board to keep in mind that as the new rates were implemented that would increase the revenue by about \$300,000.00 per year. The **CHAIRMAN** commented that they would need at least \$1 million in the General Fund for unexpected expenses. **MR. SOTELO** stated that they had asked **ESPEY CONSULTANTS** to look at the **36" RAW WATER LINE** with the idea that they would place this item with the tax bond rather than revenue bond. He indicated that they were working on optimizing the needs of the system. He mentioned that **CUATES LIFTSTATION** was pretty old and also has a bottleneck thru **WATER PLANT NO. 2**. He said that they would be able to treat the water to the highest quality through micro-filtration. He also discussed a request from the **PORT OF BROWNSVILLE** for a company wanting to relocate their facilities from their headquarters to **PORT ISABEL** and have asked to water and wastewater services. He said that they had met with them and they said that it was not cost effective for them to extend their lines. He also said that they were considering a larger line hoping to develop at the port in the future. **MR. SOTELO** said that they would be looking into this issue soon. He also said that he would like to be prepared for the future of the surrounding communities to offer water and wastewater services. He also said that he recommended a very thorough study of the system. **MR. WAYNE HUNTER** of **ESPEY CONSULTANTS** reported on the **OPTIMIZATION OF THE RAW WATER TRANSMISSION FACILITIES**. He mentioned the Raw Water Supply System included the Raw Water Intake Facility; Reservoir Pump Station No. 4 Facility; Cuates Pump Station Facility; Water Treatment No. 2; and Water Treatment Plant No. 1. **MR. HUNTER** stated that their focus was primarily on Reservoir Pump Station No. 4 since it was 9.27 miles from the river to **CUATES** then to the **WATER PLANT** for a total of 12. or 13 miles. He said that previous work in mid 2009 included rehabilitation or replacement of the existing 48,963 linear feet of 36 inch diameter raw water pipeline needed to reduce accelerating recent rate of failures which included 10 to date and 4 in last year. He said that the costs were significant for each failure and sole source supply interruption presents great risks to customers. He also mentioned that the driving issues were: reliability for raw water supply; assumed design hydraulic capacity of 15 mgd; and to preserve eligibility for ARRA grant funding. He reviewed the raw water requirements which included from the year 2004 thru 2025.

He also said that results of analysis performed in August 2009 included the design plans and suggest intent of design for two operating scenarios: 1.) Demand up to 7.8 mgd by gravity or 2.) Up to 15.0 mgd by pressure. He also mentioned the proposed hydraulic capacity of the pipeline and pump station listed on as-built documents: 1.) 13.25 mgd; and 2.) 15 mgd installed capacity, *TCEQ* non-compliant. He said that actual hydraulic capacity of the pipeline and pump station based on the pump curve and system curve would be: 1.) 10.7 mgd; and 2.) 11.3 mgd installed capacity. He recommended a two part solution: 1.) Pipeline Rehab to avoid another service interruption and enhance conveyance and pressure capabilities including work with a minimum surface disruption and lowest construction cost and duration; 2.) PS Modification to meet the current maximum day demand and to enhance the pump capability to meet year 2025 maximum month demand at "C" 120. **MR. HUNTER** also recommended Pipe Rehab Alternative which included fusible PVC pipe underground solution with lowest cost option in terms of pipe material and installation. He also recommended the least inside diameter among all options although requires larger pumps replacing exiting pumps, construction cost for pump modification was lowest among all alternatives. He mentioned sliplining as an underground solution was a fusible PVC pipe that had outside diameter smaller than 36 inch and pusher or pulled through the existing 36 inch RCP. He also said that the proposed inside diameter was 30.35 inches. He reviewed a summary of the fusible PVC pipe as an underground solution including construction costs. He recommended pump modifications which included: 150 hp pumps; variable frequency drives; pump control/isolation valves; air release valve; and other related electrical modifications. He reviewed the project costs of the recommended options which were: Pipeline Rehabilitation Cost-\$7,980,000.00; Pump and MCC Modification Cost-\$718,000.00; Pump Station Structure Modifications, Yard Piping, and Site Work-\$250,000.00 with a Total Project Construction Cost of \$8,954,000.00. He also included addition costs for: Pump Station Engineering-\$145,000.00; Construction Management Costs-\$40,000.00; and Resident Representative-\$208,000.00 with a Total Design and Construction Management Cost of \$393,200.00. He mentioned the basis for optimization were: 1.) Comparison between original design and actual as built demonstrates less capacity in one of four reaches of raw water system; 2.) Review of Cuates suggests as built capacity deficit may even be higher; 3.) LMWD is now delivering at capacity for at least one segment of system; 4.) Any increase in demand will subject system to higher pressures and possible lack of ability to deliver sufficient raw water and optimization can be done to quantify needs and prioritize implementation. He indicated that key components were to perform actual field testing of maximum delivery of each existing pump in each of four pump stations. He suggested the quick revisiting of service demands and consideration of *TCEQ* compliance and old system pipeline C factor. He also said that evaluation of alternatives including replacement, slipline, and pipe bursting rehabilitation. **MR. HUNTER** stated that he would get back to the board in about 30-days with a presentation on this project. **MR. JAKE WHITE** presented and reviewed existing system data on the desal pilot and sand to hopefully begin the design of the full-scale system soon. **MR. SOTELO** stated that he was looking into hiring an engineer on a part-time basis for project management. He said that he would be placed on salary and it would reduce the cost for inspection on project management at **WATER PLANT NO. 2**. **MR. WHITE** commented that there would still need to be a portion of involvement with **NRS ENGINEERS**. **MR. SOTELO** indicated that was included in the contingency. He explained that there would be a lot of work taking place in the **DISTRICT** with the **DESAL PLANT** and all the many projects that need to be completed. **MR. TENISON** stated that \$7 million was needed for the micro-filtration. **MR. SOTELO** also said that they had identified \$800,000.00 for **CUATES PUMP STATION**. He said that the maximum money needed would be about \$10 million including engineering and construction costs. The **CHAIRMAN** commented that \$12 million sounded better for him. **MR. SOTELO** stated that at \$12 million there would be revenue left over. The **CHAIRMAN** asked for any further comments and no one responded.

ITEM#4

ADJOURNMENT

The **CHAIRMAN** adjourned the meeting at **6:01 p.m.**

SCOTT D. FRIEDMAN, CHAIRMAN

RUDY H. GARCIA, SECRETARY

MINUTES APPROVED THIS _____ DAY OF _____ 2009.

