

Minutes
E&O Committee Meeting
Wednesday September 1, 2010

Attending: Karl Ansbach, Frank Black, Ramzi Deeb, Jerry Hietpas, Ike Herrick, Alan Phillips (Balcones Engineering), Christianne Castleberry (Castleberry Engineering).

Non Agenda Item – Consultant Review

Christianne Castleberry of Castleberry Engineering & Consulting (CEC) was present for the required annual consultant review. She presented the company profile and outlined the services CEC offers. She highlighted her qualifications and experience as a civil engineer, as well as her involvement with the District in many projects over the years. Christianne has a good working relationship with the District and would like that to continue.

Action: E&O Committee recommended to extend Castleberry's contract for another year.

Agenda item #1 – Section 210 Users and Reuse Water System Improvements – Jerry Hietpas (See Attachment I)

As detailed in Attachment I, a need exists for a complete evaluation of District wastewater facilities, flows, capacities, pipelines and distribution of reuse water. The objective is to change the District's reuse water permits and facilities to eliminate the need for the present cedar tracts, while maintaining the ability to dispose of reuse water in compliance with Highland Lakes regulations, when operating at maximum capacity. The goal is to develop plans that will be economically attractive to the District as an alternative to effluent evaporation. This combined with conservation of raw and potable water and maximizing reuse water usage, would be palatable to future economic property development in Lakeway.

Action: The E&O Committee recommended a study be conducted to update the District wastewater master plan while incorporating a reuse water master plan.

Agenda Item #2 – District 17 Water Interconnect– Alan Phillips

The start-up is expected this month with no financial impact due to the 3-week delay. About 90% of the electrical is complete. The installation of control panels are in progress, the runway beam is hung and the crane expected next week. Landscaping and beautification of site is being done. The doors have not arrived yet and the contractor will cover door opening with plywood until doors arrive.

No action needed from E&O – Review only

Agenda Item #3 – M-2 Status – Alan Philips

A building review was conducted by the City of Lakeway on the pre-engineered building; (1) a waiver was granted to exempt the need for stone fascia, and (2) no plat of the S-4 site was

required because a legal lot status was granted a year ago. The architectural plans will be revised to include these items and re-submitted to the City for approval.

No action needed from E&O – Review only

Agenda Item #4 – Odor Control Status – Alan Philips

Agenda Item #5 – Report on Odor Control Project Bidding (Alan Phillips)

There were five bidders initially, but two backed out. KIVA, INC was low bidder at \$249, 556 (Austin Engineering \$372,000, Keystone \$579,000). The contract was awarded to KIVA less \$20,000 (pumps removed) for \$229,556.

No action needed from E&O – Review only

Agenda Item #5 – Review Capital Projects – Karl Ansbach

Karl discussed a line by line review of all the current capital projects funded by the 13.3 million dollar bond authority. Some projects have been completed, others are in progress and some not started as yet. Two were eliminated: W-3 Sludge Collector Mechanism and S-5 Fine Bubble Diffusers/Blower. The estimated cost of all the projects is \$16,992,462. The money available for these projects from bond authority, bond interest and construction fund will result in a \$1,036,007 shortfall, compared to estimated project costs. Ansbach will develop a better format for tracking bond authority, capital budgets and actual project costs.

No action needed by E&O – Review only

Added Discussion: Recommended Procedure for E&O Committee Minutes – Ike Herrick

Ike prepared a draft proposal for formalizing the way the minutes should be handled to improve their content and distribution.

Action: E&O Committee agreed to try the procedure

REUSE WATER SYSTEM IMPROVEMENTS Proposal
Sept. 1, 2010
Jerry Hietpas

WHEREAS the \$1.3 million CIP item titled REUSE WATER SYSTEM IMPROVEMENTS needs definition.

WHEREAS LMUD's utilization of REUSE WATER (RW) for irrigation normally consumes all that is presently available and very seldom is sprayed on the cedar tracts, but there will be more RW generated due to build-out.

WHEREAS LMUD wastewater operations are subject to a permit and the Highland Lake regulations that no treated RW be sent to the lake.

WHEREAS most individual home owners now each have individual irrigation control systems using potable water for irrigation, which was the only option available to them.

WHEREAS the mode of RW operations and agreements were established years ago when RW was not considered an asset, but something to get rid of.

WHEREAS LMUD has successfully added irrigation systems using RW, and more opportunities exist.

WHEREAS LMUD, whose Board is charged to utilize LMUD assets well, owns two cedar tracts of land in prime locations for development, with potable water but not sewer services available.

WHEREAS the present TCEQ regulations give credit only for firm contract RW customers, and in the interest of water conservation LMUD desires credit for 210 customers.

WHEREAS LMUD sewer system is separated into an east and a west area, separated by an area in between of "out of district" water customers who have septic systems, who will remain so in the foreseeable future.

WHEREAS providing the ability to pump RW between the existing east and west three RW storage ponds could improve utilization of WW, substituting for potable water for irrigation.

WHEREAS there may well be a win-win opportunity by LMUD contracting to sell services to neighboring MUD Districts 11, 12, and 13 in Lakeway to provide sanitary sewer service to their newly developing areas by increasing the capacity of LMUD's west plant, and increasing the storage capacity for treated RW, and for utilizing the RW for irrigation instead of using potable water, and thus reducing the need of Cedar Tract acreage.

WHEREAS the one existing conceptual plan for relocating CT-1, (and maybe CT-2), to District 12 for sale and development of CT-2, including providing sewer by pumping it to LMUD's west treatment plant has significant costs for a developer compared to the value of the CT-1 land

WHEREAS there is a question of who has and wants what water and sewer district boundaries in and around the cedar tracts, and the possibility for changing the boundaries.

THEREFORE, in accord with the Capital Improvement Plan, LMUD Board resolves to approve a study to recommend specific alternative RW SYSTEM IMPROVEMENTS, and related issues, generally in accord with the guidelines shown below:

GUIDELINES FOR REUSE WATER SYSTEM IMPROVEMENTS STUDY

The objective is to change LMUD's RW permits and facilities to eliminate the need for the present cedar tracts. It would change where the RW is evaporated, and retain the requirement that no treated RW be put into the streams or lake. Also provide water and sewer service to the present cedar tracts for a net profitable sale to a developer.

The following is intended to provide a general scope for the various tasks to be accomplished, realizing the actual study specifics may vary some. The LMUD General Manager must advise the Board of significant variations, and keep them apprised of the progress and cost of the study.

SCOPE OF STUDY GUIDELINES

- 1 – Update LMUD Wastewater Master Plan while incorporating a Reuse Water Master Plan.
- 2 -Develop improvements to the plan presented by Haythem Dawlett, and potential operational and maintenance agreements for Districts 11, 12, and 13.
- 3 - Develop a time line for the amount of RW LMUD will generate. Update what the gallons per LUE should be, and the I & I allowance.
- 4 - Update our understanding of existing agreements with RW customers, and the potential for alternative arrangements.
- 5 - Research potential new locations where LMUD treated RW might be applied, and determine if they might be firm or 210 contracts. Determine if there is enough land to replace CT-1, and CT-2. Make a conceptual plan and cost estimate for providing RW to these locations, and permit modifications needed. Examples are under transmission lines, more golf course property, green belts, and homeowner yards, particularly adjacent to fairways.
- 6 - Evaluate the impact from the changes from potable water to RW irrigation, quantifying the additional sales to the areas in and around CT-1 and CT-2, and identify potential new potable water customers for optimum utilization of the water treatment plant.
- 7 – Investigate who has what sewer jurisdiction in and around CT-1 and CT-2. Make preliminary inquiries about modifying the jurisdictions.
- 8 – As an alternative of sending sewage from the land in and around CT-1, and CT-2, if developed, to the west plant, investigate the feasibility of sending it to the LMUD east sewage treatment plant. If feasible, develop a conceptual plan, cost estimate, and permit changes needed.
- 9 – Develop relationships with neighboring large land owners to CT-1 and CT-2 as related to their intentions for development. Estimate the increased sales value of CT-1 and CT-2 land with water and sewer compared to the cost of accomplishing this.
- 10 – For selected alternatives, develop a pro forma for the capital and operational revenues and costs.
- 11 – Deliver a timely Report.
- 12 – Develop relationships with other lake municipalities, MUDs, LCRA and politicians to develop a planned approach to TCEQ on modifying our permit(s), including credit for 210 customers. Consider an LCRA sponsored Xeriscaping initiative a part of the package.