

**MINUTES OF THE
MEETING OF THE WORKSTUDY FOR THE
WATER AND SEWER COMMISSION OF
THE TOWN OF STAR VALLEY
FRIDAY, FEBRUARY 26, 2010 @ 1:00PM
3632 EAST HIGHWAY 260, STAR VALLEY, AZ
STAR VALLEY TOWN HALL**

- **CALL TO ORDER:**

- **PLEDGE OF ALLEGIANCE:**

-  **ROLL CALL:**

- **Present:** Chairperson Leis, Vice-Chairperson Davis, Commission Member Heath, Commission Member Lyons, Deputy Town Clerk Josie Castillo (Not voting).
- **Absent/Excused:** Commission Member Hibbert, Wayne Van Horn.
- **Others Present:** Garrett Goldman, Chris Benjamin, Gary Coon, Timothy Grier, Paty Henderson, Barbara Hartwell

- **DISCUSSION AND POSSIBLE ACTION ITEMS:**

- 1. Final presentation by Tetra Tech prior to Commission and public presentation.**

Garrett Goldman of Tetra Tech addressed the Commission and stated that the absolute final presentation will be presented on March 4, 2010 Water & Sewer Meeting and distributed a draft copy of the *Town of Star Valley Preliminary Sanitary Sewer Master Plan 2010*. Mr. Goldman reviewed the draft as follows:

1. INTRODUCTION Vice-Chairperson Davis stated that the second paragraph, “*The Town needs both a reliable domestic water supply and a sanitary sewage collection and treatment system to realize substantial growth in the future*” needs to state that *the existing ground water supply needs to be protected*. Mr. Goldman agreed to make the change as requested by Vice-Chairperson Davis. Chairperson Leis stated that since the start of this project, there has been a threat discovered of water contamination of three wells and therefore agrees with Vice-Chairperson Davis’ concern and the Commission discussed this in detail. Mr. Goldman discussed the potential threat of contamination to well water and resultant changes to current standards for septic systems as opposed to existing older septic systems. Mr. Goldman stated that he will re-write the paragraph in question to address the potential threat of water contamination and change “*substantial growth*” to “*growth*” in the second paragraph.

- 2. APPROACH:**

Mr. Goldman stated that the approach is presented in a step-by-step format that can be easily understood.

- 3. MASTER PLAN STRUCTURE AND NOMENCLATURE:**

Mr. Goldman explained the definition of terms of the Master Plan.

- 4. BASE MAPPING INFORMATION:**

Mr. Goldman stated that he was unable to obtain a map of Star Valley from Peter Armenta of Central Arizona Association of Government (CAAG) and that the mapping was obtained from United States Geological Survey (USGS) and a topography map of Gila County. Mr. Goldman stated that as better mapping becomes available, this portion of the Sewer Plan can be refined. Chairperson Leis stated that he has the mapping to include in the methodology for commercial district.

5. **SANITARY SEWAGE FLOW ESTIMATION:**

A. Methodology: Mr. Goldman stated that the sewage flow estimation is based on a lumped parameter and not every individual residence. Chairperson Leis informed Mr. Goldman that a portion of Highway 260 is no longer being considered as commercial zoning in the Master Plan and Mr. Goldman stated that he would make that adjustment since commercial flows are typically higher.

B. Landuse Codes: Mr. Goldman stated that the information just mentioned by Chairperson Leis regarding changing a portion of Highway 260 from commercial will change the per capita flow rate of 54 gpcd. Mr. Goldman stated that the 80 gpcd is based on the Northern Gila County Sanitary District flow rates and could be adjusted once more accurate data is available for Star Valley. Mr. Goldman stated that the only aspect of the report that will not change is the trunk line size which will be 24 inches and allows for future development and will be expected to flow at 50% capacity. The Commission and Mr. Goldman discussed the sewage flows and sizing in detail.

Table 5-1: Mr. Goldman explained column 8 which estimates 5600 gpcd for commercial landuse and the importance of estimating the number high so as to not have to go back and change the truck line sizes, a very expensive project after initial installation.

C. Systems, Sub-systems and Subbasin Boundaries-Mr. Goldman stated that he increased the subsystems from six (6) to eight (8) to allow him to define the drainage patterns.

D. Sanitary Sewage Flows: Mr. Goldman explained the four sanitary sewage flows: average dry weather flow (ADWF), peak dry weather flow (PDWF), wet weather flow (WWF) and peak wet weather flow (PWWF). Mr. Goldman stated that the peaking factor used is ADWF and is based on actual flow measurements of the Northern Gila County Sanitary District (NGCSD) for calculation purposes.

Subbasin Areas and Estimated Flows: Mr. Goldman explained the chart columns with the Commission. Mr. Goldman stated that the treatment plant is based on processing 3M gallons per day and on total build-out in Star Valley up to a population of 7,000. Mr. Goldman explained to the Commission *Exhibit B* and the developable land in Star Valley which is 32 square miles. At Vice-Chairperson Davis' request, Mr. Goldman stated that (*i.e. the Freegard Meadow*) will be changed to (*e.g. the Freegard Meadow*).

Exhibit C: Mr. Goldman stated that the project has been broken down into 4 phases and explained the development of the phases and ground elevations. Mr. Goldman stated that once the project begins and negotiations are made with landowners, the project will have many variances. Mr. Goldman stated that Pine Ridge will be included in Phase one (1). Mr. Goldman recommended that Star Valley participate when the Arizona Department of Transportation (ADOT) enters into a design contract from the edge of Star Valley to Lion Springs. Mr. Goldman stated that it would be a prime opportunity to install a sewer line along that corridor at that time. Mr. Goldman stated that ADOT is conducting a sewer upgrade for the Town of Miami as part of an ADOT project in that town. The Commission discussed the boundaries of Star Valley and annexation.

6. Sanitary Sewage Trunk Collection System Identification and Preliminary Sizing:

C. Conceptual Trunk Sewer Line Sizing: Table 6-1: Mr. Goldman stated that the sewer lines are based on 50% pipe flow, flow scenario PWWF and 1% slope. Mr. Goldman discussed the current conditions versus the build-out. Mr. Goldman stated that the Town of Springerville has a lift station designed for 19,000 population, however, currently only has 2,000 population and are now modifying the design of the lift stations since there is no expected growth in that town. Mr. Goldman stated that it is best to be conservative and then refine the project at a later date.

Table 6-2: Mr. Goldman explained the line sizes within each phase and discussed these with the Commission. Mr. Goldman stated that Table 6-2 is based on proposed sited number one (1) for the waste water treatment facility and would add that to the page as a footnote.

7. Buildout Treatment Facility Location Identification And Comparison Analysis:

Mr. Goldman discussed the proposed locations and the positive and negative factors of each location. Mr. Goldman explained the third bullet point from the top of page 19 and stated that the 100-year flood is the regulation and can be adjusted upward during the actual planning stages.

B. Observations: Mr. Goldman stated that in his opinion from an engineering standpoint, he recommends Proposed Locations one (1) or two (2).

8. Preliminary Cost Estimates For Budgeting Purposes:

Table 8-1: Mr. Goldman stated that the table shows costs for construction and design costs for the conceptual trunk sewer line and a treatment facility only for a Total Construction cost of \$24,812,000.00. Mr. Goldman stated that the cost to provide sanitary sewer service to existing development with Star Valley is estimated to be approximately \$22,000,000.00 (total project cost:\$46,812,000.00). Mr. Goldman stated that he would clarify the costs to developers and that many questions can be answered after the Town decides on the type of technology to use for the treatment plant. The Commission and Mr. Goldman discussed all the costs and phases in depth. Mr. Goldman agreed to expound on the preliminary costs in the final report. Commission Member Heath questioned Mr. Goldman whether homeowners will be required to connect to the sewer line to which Mr. Goldman replied yes, homeowners are required to use the public sewer if available according to current laws.

9. Financing Option

Table 9-1: Mr. Goldman stated that he has identified the major funding options and that the Water Infrastructure Finance Authority of Arizona (WIFA) will be the best source of financing available to Star Valley. Mr. Goldman stated that a United States Department of Agriculture (USDA) loan is a also a good option since it serves towns with a population of less than 10,000. Mr. Goldman stated that he would check into whether the fact that Star Valley is surrounded by forestry, if USDA will would be a good source of funding and will also investigate funds availability thru the Bureau of Reclamation. Mr. Goldman stated that interim loans are available from Rural Assistance Community Corporation (RCAC) and that Congressional Earmarks are a very good potential source that is actually worked through a WIFA Loan.

10. Sanitary Sewage Collection, Disposal and Treatment Options Identification and Evaluation:


Mr. Goldman summarized the positive and the negative factors of the four (4) options presented; a bullet point will be added to the final report under Negative Factor for Option 1: *The Town of Star Valley will be responsible for all compliance requirements.* Mr. Goldman stated that if the


Town selects *Option 2* (annex into the NGCSD), NGCSD would decide on the technology used and the location of the treatment plant. However, Mr. Goldman stated that the NGCSD is very reasonable with their constituents and that their charter is to serve the Northern Gila County and considerate of the needs and wishes of the areas they serve. The Commission discussed *Option 4* and agreed that it is not a viable option rather a discussion item.

11. Conclusions:

Mr. Goldman stated that Tetra Tech recommends either *Option 1* or *Option 2* for the design, construction and operation of a sanitary sewer system serving the Town. Mr. Goldman explained the petition process for opting to be annexed into the NGCSD and stated that once the NGCSD passes a resolution to provide service to Star Valley, the Town can be assured that NGCSD will provide the service. Mr. Goldman stated that the political campaign portion must be worked out before pursuing this option. Mr. Goldman stated that eventually, Star Valley will be faced with making a decision regarding their sewer needs and the Preliminary Sanitary Master Plan will be a basis as a starting point. Mr. Goldman stated that the Preliminary Sanitary Master Plan is a living, breathing and updatable document. Mr. Goldman stated that the cost for this project 4 years ago would have been 60% more expensive for the construction portion and gave a real life example of a project in Payson on McKamey Street that was originally estimated to cost \$641K and the actual final cost was \$400K. At Chairperson Leis' request, Mr. Goldman agreed to create a graph of costs, current and future, in the conclusion portion of the final report. The Commission discussed various ways to present it to the public without including the threat element of the possibility that the project will be mandated by governmental intervention. Mr. Goldman stated that he will add treatment level costs to *Appendix A* and that he will expound on *page 22, Table 8-1*. Mr. Goldman stated that he has called this project "*Preliminary*" due to his not wanting any confusion in people believing this is a final document, rather a first step towards a sewer plan for Star Valley. Mr. Goldman explained how he will present the final presentation on March 4, 2010; a PowerPoint Presentation will be used and not a detailed explanation as during today's workstudy and will be bound into three ring binders. Mr. Goldman stated that this ground floor project has been fun for him and appreciates the opportunity extended to him. Chairperson Leis commended Mr. Goldman for all his effort and work on this project, presented in layman's terms as the Commission has requested and for the constituents of Star Valley.

2. Discussion and possible action on the criteria for bids for well monitoring services.

 Chairperson Leis stated that the Council determined that the Commission needs to submit for bids for well monitoring services, using the same criteria for all hydrology firms. Chairperson Leis recommends that the criteria be for a total of 16 well monitors, 15 of which are monitored on a quarterly basis and the Tower Well monitored monthly. Chairperson Leis stated that there are a total 8 rain gauges that also need to be analyzed on a semi-annual basis. The Commission discussed the rain gauges and determined that the rain gauges need to be analyzed on a quarterly basis. Chairperson Leis stated that there are 4 rain gauges placed, and 4 additional that the Commission needs to determine where to place.

 **Motion:** To monitor the rain gauges on a quarterly basis., **Action:** Adjourn, **Moved by** Commission Member Heath, **Seconded by** Commission Member Lyons. The motion is voted on and passed 4-0.

Mr. Goldman interjected that the State of Arizona does not allow the bid process for professional services, rather on a qualification basis, and then the price can be negotiated. Mr. Goldman continued by stating that if the price cannot be negotiated with the first firm, then the price

negotiation begins with the second firm on the list. The Town Manager Timothy Grier and Mr. Goldman discussed engineering services, which involves simply collecting technical data, versus professional engineering services, which would entail analyzing the data collected. Mr. Grier recommended that the Commission submit a request for qualifications from the hydrology firms and this motion can be made during this agenda item.

Motion: motion to table until the Water & Sewer Commission Meeting of March 4, 2010., **Action:** Table, **Moved by** Commission Member Lyons, **Seconded by** Commission Member Heath.

The motion is voted on and passed 4-0.

-  **COMMENTS FROM THE PUBLIC:**

Chris Benjamin stated that the total number of well monitors is 19 instead of 18 as previously stated by Chairperson Leis. Chairperson Leis replied that he would re-check the total number of well monitors.

- **ADJOURNMENT:**

 **Motion:** Action: Adjourn, Moved by Commission Member Lyons, Seconded by Vice-Chairperson Davis.

The motion is voted on and passed 4-0.

APPROVED:

_____ **Date:** _____
Vern Leis, Chairperson

ATTEST:

Josie Castillo, Executive Assistant

CERTIFICATION:

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the regular meeting of the Water and Sewer Commission of the Town of Star Valley held on this day, the 26th February 2010. I further certify that the meeting was duly called and held, and that a quorum was present.

Dated this 6th day of May, 2010.

Josie Castillo, Executive Assistant