

5.0 WASTEWATER REPORT

5.1 *Projected Wastewater Loads:* Appendix B contains a detailed breakdown of expected wastewater flows. The wastewater flows are based on 90% of anticipated indoor use. Maximum Monthly Flows are based on 125% of average daily flows. These are summarized as follows

<i>Table 3 – Summary of Expected Wastewater Loads</i>		
<i>Land Use</i>	<i>Average Wastewater Load (GPD)</i>	<i>Maximum Monthly Flow (GPD)</i>
Residential (196 Units)		
Wastewater ¹	31,494	39,368
Rec. Center		
Wastewater ¹	493	616
Totals	31,987	39,984

Note ¹ Based on 90% of indoor use.

5.2 *Treatment Facilities:* The 4-Way Metropolitan District is working on finalizing an Inter-Governmental Agreement with Woodmen Hills Metropolitan District (WHMD) to participate in the existing Woodmen Hills Wastewater Treatment Plant. A letter of commitment is attached in Appendix E. The expected loads from this development represent about 2.5 % of the existing plant permitted capacity of 1,300,000 gal/day.

5.3 *Collection and Pumping Facilities:* The 4-Way Metropolitan District is proposing to develop a wastewater lift station within the existing Water Treatment Plant site. This site has already been approved for utility location and, as mentioned, is currently being used for water treatment. It is expected that the facility will be initially sized for an average daily flow of 0.15 MGD or 150,000 GPD. The subject development would represent just below 30% of the proposed capacity.

The force main from the lift station would be a 6 inch line that extends westerly along Stapleton to an existing manhole near Meridian Ranch Boulevard where it would connect to the existing Woodmen Hills system.

6.0 WASTEWATER TREATMENT INFORMATION

6.1 Woodmen Hills System:

The Woodmen Hills Metropolitan District (WHMD) has committed to serve the subject property with wastewater treatment.

WHMD has a hydraulic capacity in the Plant of 0.866 MGD. However, WHMD has certain current limitations within that rating. To help offset some of those limitations, “off-loading” of existing wastewater occurred in 2009 and further off-loading is scheduled to occur in late 2013. Consequently, WHMD formal commitment for this filing can not be exercised until after the additional off-loading has occurred.

Additionally, WHMD is completing the planning and engineering on a new plant facility that is expected to be required to be online around 2018. It is expected that this requirement will be driven not by hydraulic load but by changes in effluent parameters (discharge limitations).

6.2 Required Off-Site Improvements and Constraints:

- The 4-Way Ranch Metropolitan District will be responsible for all off-site improvements which will include but not limited to:

- Piping and pumping to the WHMD plant.
- Wastewater metering at the lift station

The design of all on-site and off-site facilities (including lift station and force mains) will be subject to WHMD approvals and inspections.

- The District shall meet the terms of all applicable wastewater regulations of the district in terms of quantity and quality.
- Woodmen Hills will become the Operator in Responsible Charge (ORC) of the 4-Way Ranch wastewater system.
- 4-Way Ranch will participate in interim improvements to the WHMD Wastewater Treatment Plant in accordance with their allocation as determined in a service agreement. 4-Way Ranch will participate in major plant renovations expected within the next 5 years in accordance with that same agreement.
- No taps will be accepted on-line before January 1, 2014.
- A service agreement with WHMD must be finalized prior to the recording of this final plat that will, at a minimum, specify the following:
 - Participation in interim and major plant facilities
 - Operation/maintenance and ORC of 4-Way Ranch wastewater facilities
 - Funding terms and timing of funding sources

- Plant Investment Fee allocation
- Other terms of Operation, Capacity, and Maintenance
- Access and Inspections

6.3 *Conclusions:*

Woodmen Hills can provide treatment for this subject filing. This will be under the conditions described in the Commitment Letter and the upcoming Service Agreement.