

**TALKING ROCK RANCH
PHASE 2 & 3
SEWER COLLECTION SYSTEM
DESIGN REPORT**

Prepared for:

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Appendix A

Site map

Appendix B

Spreadsheets detailing results of analysis

Appendix C

Drawing sheets 1 and 2 showing site.
Zones
Number of pumps
Length of segments
Size of low pressure sewer lines



1. Introduction

General Description

Talking Rock Ranch Subdivision consists of residential and recreational facilities. This planned area development (PAD) was approved by the Yavapai County Board of Supervisors on October 6, 1999 and Amended on May 8, 2000.

The entire subdivision encompasses more than 2000 acres of undeveloped and newly developed land that slopes towards Inscription Canyon. The site is divided by Williamson Valley Road. The site consists of forested areas with, sometimes, extreme slopes. Phases 2 and 3 are located in the Southeastern portion of this subdivision off Talking Rock Ranch Road. See Appendix A for an area site map.

This report examines the design of the sewer system for Phases 2, 3 and future Phases 5 and 6, adjacent to Phase 3 of the Talking Rock Ranch Subdivision. The project site is located in portions of Sections 15 and 22, Township 16 North, Range 3 West, Gila and Salt River and Meridian, Yavapai County, Arizona. The project is generally located in the Southern portion of Williamson Valley and straddles Williamson Valley Road.

2. Objective

This report will address the combined gravity and low pressure sewer system design for Talking Rock Ranch Subdivision within Phases 2 and 3. As with Phase 1 all lots lower in elevation than the sewer line will be served by a homeowner installed and operated grinder pump station. These individual pump stations are also the pressure source for the low pressure sewers.

Phase 1 of Talking Rock Ranch consists of a low pressure sewer system that discharges to a gravity sewer system. The gravity sewer in Phase 1 then discharges into a Homeowner's Association operated and maintained duplex pump station. This pump station is designed to pump sewage from Phase 1 and future Phases east of Williamson Valley Road to an existing treatment plant located at the south end of the Talking Rock Ranch property. Piping for Phase 1 has been sized to service the future Phases of Talking Rock Ranch. Phases 2 and 3 will connect to the existing Phase 1 sewer system.