

March 29, 2013

Subject: Powder Mountain - Tank, Well Pump Station, Water and Sewer Improvements Review

(Review Letter #2)

Project Location: Powder Mountain Ski Resort, Utah

Reeve Project #4971-05

To whom it may concern:

Reeve & Associates have been asked to review the plans for the above mentioned project. The design was prepared by Bowen Collins & Associates and NV5, and was dated March, 2013. Following is a list of specific items of concern:

- 1. Concept review comments dated January 21, 2013 do not appear to have been specifically addressed. Please provide a written response addressing each of these comments.
- 2. Structural calculations have not been provided. It is impossible to adequately review structural items without the structural calculations. Please provide.
- 3. Neither the master plan nor the first phase plan shows how the existing water system and the new water system will be connected. This is important in emergency situations. Please provide.
- 4. Plans and specifications need to be submitted and reviewed by DEQ. Please provide approval letter.
- 5. Specifications are needed for the grinder pumps, controls, and vault sizing, etc.
- 6. Plans do not indicate fixed power generators for sewer pump stations. The main sewer pump station by the saddle must have a fixed power generator. Other pump stations, that do not have a fixed power generator, must have greater storage capacity for waste water (24 hour minimum). All sewer pump stations must have communication back to a common site to monitor operation of the pumps and equipment.
- 7. Plans indicate hard wiring between the well pumping station and the reservoir for water level control. As the system expands a SCADA system or other appropriate system will be required to reduce control problems and improve service.
- 8. Air Vacs must be added at high points where individual service connections on the upper side are not present and in operation. Please revise.
- 9. Additional comments will follow after continuing meetings with The Powder Mountain Water and Sewer Improvement district and continued review of final construction plans.

Signed,

John P. Reeve, PE, PSE, PLS

Principal Engineer