



May 13, 2024

George Youngberg (youngbergdrilling@gmail.com)
Youngberg Pump and Well Drilling

Sent by email only.

Re: **Small System Water Project (PR#58-2024)**
Estacada Mobile Village (PWS ID#01252)
Site Plan Approval for Proposed Well & Conditional Approval for Storage

Dear George:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well and storage for Estacada Mobile Village. On April 18, 2024, our office received a project description with a proposed well plan, and on May 6, 2024, storage tank information. A plan review fee of \$825 was received on April 17, 2024.

The project includes drilling a well to a depth of 600 to 800 ft, with steel casing and sealed into a consolidated rock formation. The well will be located near the center of the property within a curbed green space. The well will pump into two Norwesco 5000-gallon storage tanks located on a concrete slab.

Proposed Well:

A regional geologist in our program reviewed the proposed well construction. He noted the following:

- Deeper wells are common in this area but depth to a water-bearing zone appears to be highly variable (CLAC66757, CLAC52813, CLAC18835), in part due to elevation differences between well sites. However, the nearby deep wells intercept water within the underlying basalts at great depth. Therefore, the estimate that an adequate water supply may not be found until 600 to 800 ft below ground level appears to be reasonable. The casing seal should be placed to a depth that is in accordance with WRD well construction standards and will depend on the materials encountered during

drilling.

The project is granted site plan approval. Once construction of the well is complete, please submit:

1. The well driller's report (well log).
2. Well pumping test information including static water level, pumping rate, drawdown and rate of recovery.
3. Pump information.
4. Raw (Untreated) Water Quality Data including coliform bacteria, nitrate and arsenic. These are to be taken from the new well's raw water sample tap at the wellhead.
5. Engineered plans that show the above-well structure detail including the well house, concrete slab, drainage, pump-to-waste piping and plans and specifications for connection of the new well to the water system.
6. A copy of the Water Right Permit from WRD, if a water right permit is required.

Poly Storage Tanks:

The plans are approved with the following conditions:

- A fence or other vandal deterrence must be provided for the storage tanks.
- Screened vent(s) must be provided above the highest water level. Please provide information on the screen used.
- The outlet end of the drain/overflow must be fitted with angle-flap valve or equivalent protection and must discharge with an airgap to a watercourse or storm drain capable of accommodating the flow.
- Disinfection of the reservoir prior to use must be accomplished according to AWWA Standard C652. Coliform bacteria sample result(s) must be submitted after disinfection of the reservoir is complete.
- The access hatch must have a lockable watertight cover.
- A silt stop must be provided at the outlet pipe.

Please submit pictures and/or documentation to show that the storage tanks meet the listed conditions. The above items should reference Plan Review #58-2024 and can be emailed to me at keith.male@oha.oregon.gov.

Until we receive verification that the conditions have been met and final approval has been issued, the storage tanks are not approved for use.

If you have any questions, please feel free to call me at 503-939-1322 or email me.

Sincerely,



Keith Male, PE
Regional Engineer
Drinking Water Services

cc: Julie Wray, DWS
Joel Ferguson, REHS, Clackamas County Health Department
Tommy Laird, Well Construction Program Coordinator, OWRD