

September 2, 2020

Tom Ferrell, PE
PACE Engineers, Inc.
4500 Kruse Way, Suite 250
Lake Oswego, OR 97035-2564

**Re: Crystal Springs Water District (PWS ID #00386)
South Reservoir & Transmission Main (PACE Project #18877)
Conditional Approval – Plan Review #56-2020**

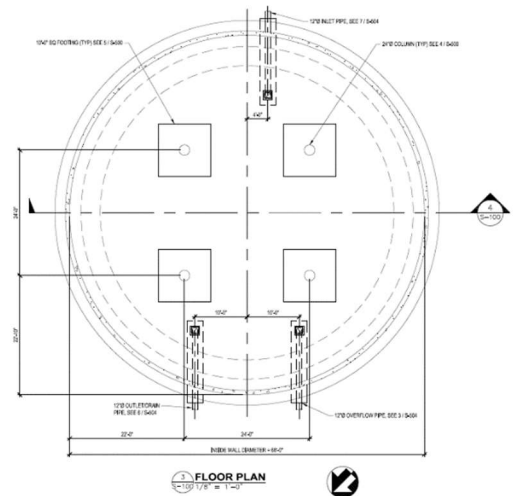
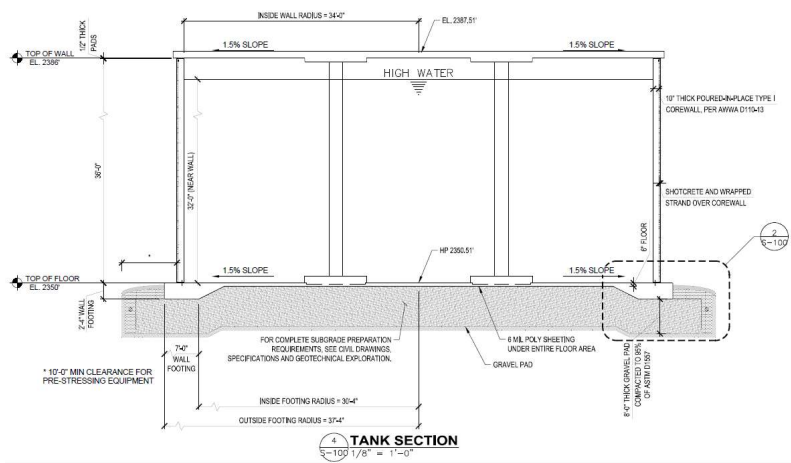
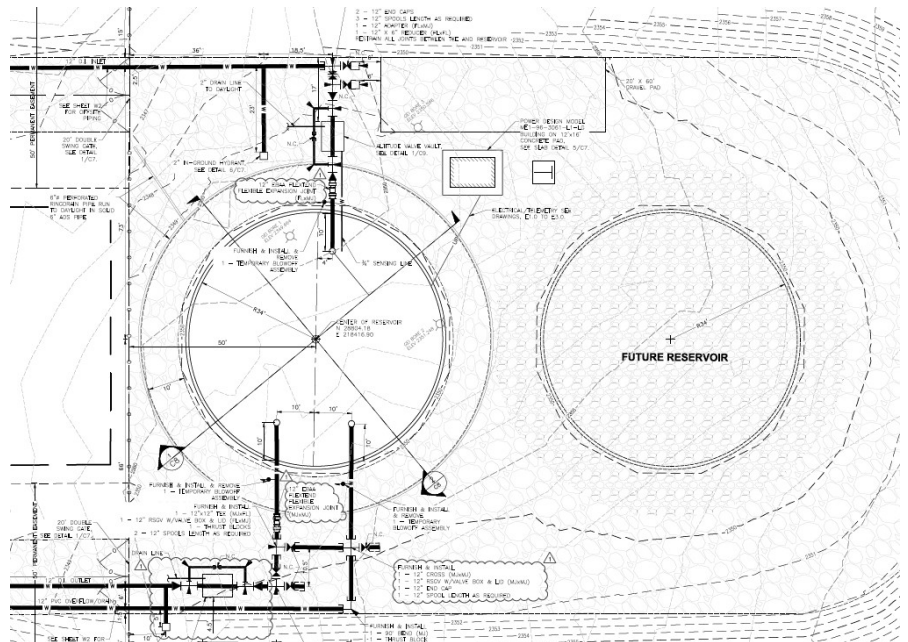
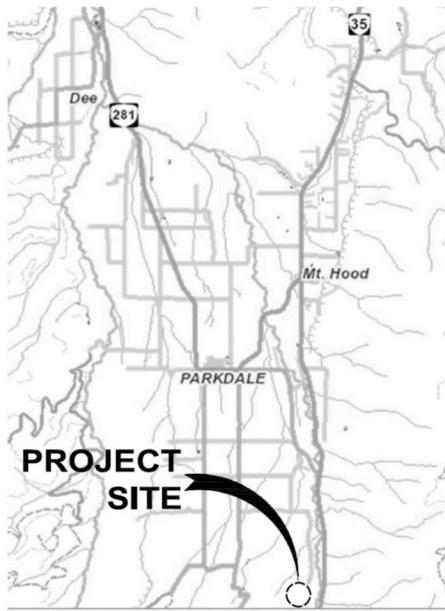
Dear Mr. Ferrell,

I have completed my review of the submitted plans, land use compatibility documentation, and geotechnical report (received on August 18, 2020) along with a check for \$2,475 (received August 26, 2020) for the South Reservoir and Transmission Mains (PACE Project #18877) on behalf of the Crystal Springs Water District (CSWD). Since the waterlines are covered under CSWD's existing Waterline Exemption, waterline plans were not reviewed. \$825 was previously credited from plan review #55-2020, therefore the total plan review fee received for this project was \$3,300.

The project involves construction of an 880,000-gallon prestressed concrete reservoir on two tax lots near Dog River Road (1S, 10E, Sec 20, TL200 & 1S, 10E, Sec 21, TL400) owned by Hood River County. The site also has room for a future tank as shown on the submitted plans. The new reservoir will tie into the existing CSWD 14" dia. cast iron pipe. The reservoir is not used for disinfection contact time, but rather serves the distribution system to maintain pressure, fire flow, and meet demands for the CSWD.

Crystal Springs Water District South Reservoir (PR #56-2020)

- | | |
|---|---|
| <ul style="list-style-type: none">• 880,000 gallon pre-stressed concrete tank• 32-ft water level depth• Inside wall radius = 34-ft w/ 10" thick walls• Inside diameter = 68-ft• Top of floor elev. = 2,350-ft• Top of wall elev. = 2,386-ft (wall height = 36-ft)• Overflow elev. = 2,382-ft (4-ft from top of side wall = 32-ft water level depth) | <ul style="list-style-type: none">• 12" dia. DIP inlet w/Flextend joint• Separate 12" dia DIP outlet w/Flextend joint• 12" PVC overflow/drain to daylight• Altitude valve• Flowmeter• Screened roof vent with #24 mesh stainless steel screen• Double-leaf roof hatch• Interior ladder |
|---|---|



The project is approved for construction as shown in the submitted plans, provided the following conditions are met:

1. When the access manhole is on the roof of the reservoir there shall be a curbing around the opening and a lockable, watertight cover that overlaps the curbing [OAR 333-061-0050(6)(J)].
2. Non-conductive piping such as the PVC overflow/drain piping shall have a tracer wire for locating the pipe when the pipeline is underground. The wire shall be No. 18 AWG (minimum) solid copper with blue colored insulation. Ends of wire shall be accessible in water meter boxes, valve boxes or casings, or outside the foundation of buildings where the pipeline enters the building. The distance between tracer lead access locations shall not be more than 1,000 feet. Joints or splices in wire shall be waterproof. [OAR 333-061-0050(8)(k)].

3. Should the interior surface of the finished water storage tank be provided with a protective coating, the coating shall meet the requirements of NSF Standard 61: Drinking Water System Components - Health Effects or equivalent [OAR 333-061-0050(6)(Q)].

These conditions are included among construction standards for reservoirs and waterlines under OAR 333-061-0050 on-line at:

<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/RULES/Documents/61-0050.pdf>

When the project is complete, please respond if the project was completed as planned and according to the conditions listed above. Correspondence may be in the form of a letter, via e-mail, or using our check list we will mail to you in about 6 months. Written correspondence should reference plan review #56-2020 and water system ID #00386 for the Crystal Springs Water District and can be either e-mailed to me at evan.e.hofeld@state.or.us or mailed to:

Attn: Evan Hofeld
OHA-Drinking Water Services
PO Box 14450
Portland, OR 97293-0350

Until we receive verification that the project was completed with the conditions listed above met and we have granted Final Approval for the project, the reservoir is not approved for use. If you have any questions or would like this information in an alternate format, please feel free to contact me at any time at 971-673-0419 or via e-mail at evan.e.hofeld@dhsaha.state.or.us.

Sincerely,



Evan Hofeld, Regional Engineer
Oregon Health Authority – Drinking Water Services

Cc. Fredrick Schatz
Crystal Springs Water District
PO Box 187
Odell, OR 97044