



**PJC & Associates, Inc.**  
Consulting Engineers & Geologists

November 17, 2020

Job No. 9935.01

Fabrice Caporal  
[fcaporal@byyoursite.com](mailto:fcaporal@byyoursite.com)  
c/o: Brian Hall  
[bhall@mlengr.com](mailto:bhall@mlengr.com)

Subject: Geotechnical Review of Civil Engineering Plans  
Proposed Reservoir  
11501 Elk Mountain Road  
Upper Lake, California

References: Report titled, "Geotechnical Investigation, Proposed Residence, Barn, Swimming Pool and Pond, 11501 Elk Mountain Road, Upper Lake, California", prepared by PJC & Associates, Inc., dated October 8, 2020.

Civil Engineering Plans titled, "Elk Mountain Reservoir", Sheets C1 through C7, prepared by Munselle Civil Engineering, dated November 2, 2020.

Dear Fabrice:

PJC & Associates, Inc. (PJC) is pleased to submit this letter which presents the results of our geotechnical review of civil engineering plans for the proposed reservoir located at 11501 Elk Mountain Road in Upper Lake, California. PJC previously performed a geotechnical investigation for the project and presented the results of the investigation in a written report, dated October 8, 2020. The purpose of our plan review was to confirm that the recommendations of our geotechnical report were incorporated into the above referenced plans.

Based on the results of our geotechnical review, the above referenced project plans conform to the recommendations of the project geotechnical report. However, we have the following comments:

1. As noted in our report, we recommend a hydrostatic relief pipe be installed beneath the pond liner to reduce the risk of hydrostatic uplift if the pond water level is rapidly lowered.
2. At the terminus of the pond spillway, the Sheet C5 indicates a 1:1 slope flowing towards Middle Creek. Proper erosion mitigation should be provided in order to minimize slope scouring or destabilization of the stream embankment.
3. It is proposed to place one foot of soil over the synthetic liner. The selection of equipment to perform this work is critical in order to reduce the risk of puncture of the

liner. The equipment used should be in accordance with the synthetic liner manufacture standards. Track mounted equipment should not be used.

4. As noted on the plans, PJC should observe all aspect of earthwork and grading and provide observation and testing services as needed. This includes the placement and installation of the pond and spillway liners. PJC should also observe the placement and installation of all site drainage facilities. PJC will not accept responsibility for items we are not notified to observe. PJC requires at least 48 hours notice to perform the work.

We trust that this is the information you require at this time. If you have any questions concerning the content of this letter, please call.

Sincerely,

PJC & ASSOCIATES, INC.

Patrick J. Conway  
Geotechnical Engineer  
GE 2303, California

PJC:bc

cc: Westin McAsey ([westin@munsellecivil.com](mailto:westin@munsellecivil.com))

