

DEPARTMENT OF CONSERVATION

## DIVISION OF MINES AND GEOLOGY

FERRY BUILDING, SAN FRANCISCO 94111



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2135 Akard Avenue  
96001

November 30, 1967

Mr. Bruce W. Robinson, Planning Director  
El Dorado County Office Center  
2850 Cold Springs Road  
Placerville, California 95667

Dear Bruce:

This letter report is in answer to your request that I comment on the geologic problems that may be encountered in developing the Kyburz Property located at the south end of the Tahoe Valley Airport.

The property is underlain by lake beds and glacial outwash of Quaternary age, consisting of well-bedded clays with interbeds of sand, silt and gravel. The topography is low, flat and crossed by the present channel of the Upper Truckee River. The property is also crossed by several ox-bows which represent older channels of the river that were abandoned in modern times. Geologic mapping by the California Division of Mines and Geology and drilling records on file at the airport indicate that these deposits are at least 25 feet thick and may, in places, reach depths of over 100 feet.

The clay which makes up a large part of the foundation rock here, could be a poor foundation material if too great a weight is placed on it. Although the clay is strong in a dry condition, when saturated with water it tends to yield and spread sideways during loading causing excessive and uneven settling of the land surface. I do not anticipate that this would be a problem if foundation studies are completed before actual building takes place and effective drainage is provided from the clay into the river.

Mr. Bruce W. Robinson (cont'd)

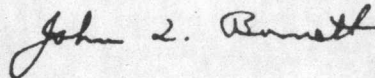
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A major geologic problem with regard to this proposal is that of flooding of the Upper Truckee River. During periods of Spring runoff, the river is not contained within its present channel but fills all of the older channels as well as the drainage ditches around the airport. If adequate channel space for the river is not available, damming and subsequent flooding of this property will result.

I understand that this proposal will be brought before the Commission on December 14. If you have any questions regarding my comments, please contact me at my San Francisco office.

Sincerely,



JOHN L. BURNETT  
Associate Geologist

JLB:mh

cc: Edward N. Gladish  
Gordon B. Oakeshott

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