



State of Utah
DEPARTMENT OF NATURAL RESOURCES
UTAH GEOLOGICAL SURVEY

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December 2, 1996

Fay Cope, Town Manager
Town of Springdale
P.O. Box 187
Springdale, Utah 84767

Reference: Development on or near the Springdale landslide

Dear Fay:

At your request, I am writing to reiterate the opinion of the Utah Geological Survey (UGS) regarding development on or near the Springdale landslide. In a letter dated December 23, 1992, UGS geologist Barry J. Solomon indicated that "given the history of repeated movement of the slide mass, indications of continued instability, and the historical (sic) instability of similar geologic features elsewhere, it would be inadvisable at this time to consider development on or near the landslide without first conducting detailed studies." I concur with Barry's opinion and add that a recent independent study of the landslide by R.W. Jibson and E.L. Harp of the U. S. Geological Survey (1996; Environmental & Engineering Geoscience, v. II, no. 2, p. 137-150) similarly concludes that "future earthquakes or particularly wet periods may trigger additional movement of the landslide mass." Jibson and Harp estimate that such movement may be similar to that experienced in 1992 and result in several meters of displacement over a period of hours or days. In addition to the potential for reactivation of the entire landslide mass, Jibson and Harp also indicate that "perhaps more hazardous is the potential for shallow landsliding from the toe and flanks of the landslide." In the absence of a detailed geotechnical-engineering slope-stability evaluation documenting the post-earthquake stability of the landslide, I concur with Barry Solomon's recommendation that you do not consider any construction on or modification of the landslide.

I appreciate the opportunity to be of service to the Town of Springdale. If you have any further questions please call me at (801) 537-3380.

Sincerely,

Francis X. Ashland, Project Geologist
Applied Geology Program

