

Section 16.17.08 Content of Geologic Hazard Reports.

This section sets forth the required content for Geologic Hazard Reports required, or in certain specified circumstances recommended, by this chapter.

(1) An engineering geology report that includes a geologic hazards evaluation shall be prepared by a qualified engineering geologist. The report shall be site-specific and shall identify all known or suspected potential geologic hazards, originating on-site or off-site, whether previously mapped or unmapped, that may affect the particular property or surrounding properties.

(2) If the engineering geology report described in this section indicates a potential for debris flow, a debris flow evaluation and report shall include test pits or trench logs (scaled one (1) inch to five (5) feet or larger), include estimates of the number and frequency of past events and their thicknesses and volume; and include estimates of the recurrence, depth and impact forces anticipated in future events.

Debris flow reports shall be prepared by an engineering geologist from the list in Wasatch County, and a professional engineer licensed to practice in the State of Utah. The report should be signed by both preparers, including the professional engineer's original stamp and signature.

(3) Landslide reports shall be prepared in accordance with the Utah Geological Survey's Guidelines for Evaluating Landslide Hazards in Utah (Hylland, 1996), a copy of which may be obtained from the Planning Department. Landslide reports shall be prepared by a qualified engineering geologist placed on the list in Wasatch County and a professional engineer licensed to practice in the State of Utah. The report should be signed by both preparers, including the professional engineer's original stamp and signature.

(4) For any proposed subdivision located within an identified landslide area on the Geologic Hazards Overlay Zone Maps adopted herewith, the entire landslide mass must be evaluated for stability.

(5) Other geologic hazards or engineering geology reports shall be prepared in accordance with the Utah Association of Engineering Geologists (AEG) Guidelines for Preparing Engineering Geologic Reports in Utah, a copy of which may be obtained from the Planning Department. These reports should be prepared by a qualified engineering geologist placed on the list in Wasatch County, and as appropriate, in conjunction with a professional engineer licensed to practice in the State of Utah, each addressing their specific areas of expertise. All reports shall be signed by the preparers. Reports signed by a professional engineer must include the professional engineer's original stamp and signature.

Certification by Wasatch County consists of receiving a copy of the degree and letter verifying experience as stated above.

(6) All reports should be prepared in accordance with the accepted standard of care at the time the report is written and should address any specific additional issues identified by this Title. All reports shall include, at a minimum:

(a) A geologic map, at an easily readable scale, (with reference) showing the development plans considered, including septic systems and irrigated landscaping. All reports shall be signed by the preparer;

(b) Fault study reports shall contain all requirements as described in the document Minimum Standards for Surface Fault Rupture Studies, published by Salt Lake County, a copy of which may be obtained from the Planning Department. Fault study reports shall be prepared and signed by a qualified engineering geologist on the list in Wasatch County;

(c) Liquefaction analyses, if applicable, shall contain all surface geology, bedrock geology (where exposed), bedding attitudes, faults or other structural features, and the locations of any geologic hazards; liquefaction analyses will not be required on single family residences;

(d) A detailed site map of the subject area showing any site-specific mapping performed as part of the geologic evaluation, and including boundaries and features related to any geologic hazards, topography, and drainage. The site map must show the location and boundaries of the geologic hazard(s), delineation of any recommended setback distances from geologic hazard(s), and recommended

location(s) for structures. Buildable and non-buildable areas shall be clearly identified. Scale shall be identified and must be easily readable;

(e) Trench logs and test pit logs (scale: one (1) inch equals five (5) feet, or larger), boring logs (scale: one (1) inch equals five (5) feet, or larger), aerial photographs, references with citations, and other supporting information, as applicable;

(f) Field observations including depth to groundwater, surface water conditions, bedrock outcroppings or other pertinent information that was used in establishing the results and conclusions presented in the report;

(g) Laboratory data substantiating soil and/or rock characteristics used in the engineering/geological analysis of the site;

(h) Conclusions that summarize the characteristics of the geologic hazards, and that address the potential effects of the geologic conditions and geologic hazards on the proposed development and occupants thereof in terms of risk and potential damage;

(i) Specific recommendations for avoidance or mitigation of the effects of the hazard(s), consistent with the purposes set forth in this chapter;

(j) Specific recommendations for additional or more detailed evaluation, as may be required to understand or quantify the hazard, evaluate whether mitigation measures are required, and evaluate mitigation options;

(k) Evidence on which recommendations and conclusions are based shall be clearly stated in the report;

(l) Additional or more detailed evaluation may be required, if recommended by the report or as advised by a review, to understand or quantify the hazard, or to evaluate whether mitigation measures recommended in the report are adequate; and

(m) A geologic hazards assessment and all recommendations and requirements given therein, shall remain valid for seven (7) years from the date of completion, unless a shorter period is specified in the report by the preparer. The exception to the seven (7) year period of validity is where a change in site conditions, change in proposed development, technical information or County policy significantly affects the technical data, analysis, conclusions or requirements of the assessment. In this case the County may require a new or revised assessment.

(2003-24, Amended, 11/24/2003)