21A.50.260 Landslide hazard areas – Development standards and permitted alterations.

A development proposal containing, or within 50 feet of, a landslide hazard area shall meet the following requirements:

(1) A minimum buffer of 50 feet shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a landslide or erosion hazard or as otherwise necessary to protect the public health, safety, and welfare.

(2) The buffer may be reduced to a minimum of 15 feet if, based on a critical areas study, the City determines that the reduction will adequately protect the proposed development and other properties, the critical area and other critical areas off-site.

(a) For single-family residential building permits only, the City may waive the critical areas study requirement if other development in the area has already provided sufficient information or if such information is otherwise readily available.

(b) In addition to the general requirements for critical areas studies that may be required consistent with SMC 21A.50.130, the critical areas study for a landslide hazard area shall be:

(i) A geotechnical report prepared by a qualified professional consistent with SMC 21A.15.545, unless otherwise approved by the city; and

(ii) Inclusive of the following elements: shall specifically include:

(Ai) A description of the extent and type of vegetative cover;

(Bii) A description of subsurface conditions based on data from site-specific explorations;

(Ciii) Descriptions of surface and groundwater conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;

(Div) An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;

(Eiv) An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;

(Fiv) Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on downslope properties;

(Gvii) A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
Recommendations for building siting limitations; and

An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion; and

A comprehensive study of slope stability including an analysis of proposed cuts, fills, and other site grading and construction effects where the overall minimum factor of safety for slope stability is 1.5 for static conditions and 1.1 for seismic conditions as based on current building code seismic design conditions.

(3) Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a landslide hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe by the City. The City may require the applicant to submit a report prepared by a certified arborist to confirm hazard tree conditions. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection.

(4) Vegetation on slopes within a landslide hazard area or buffer that has been damaged by human activity or infested by noxious weeds may be replaced with native vegetation pursuant to an enhancement plan approved by the City pursuant to SMC 21A.50.060. The use of hazardous substances, pesticides, and fertilizers in landslide hazard areas and their buffers may be prohibited by the City.

(5) Alterations to landslide hazard areas and buffers may be allowed only as follows:

(a) A landslide hazard area located on a slope 40 percent or steeper may be altered only if the alteration meets the following standards and limitations:

(i) Approved surface water conveyances, as specified in the applicable City-adopted storm water requirements, may be allowed in a landslide hazard area if they are installed in a manner to minimize disturbance to the slope and vegetation;

(ii) Public and private trails may be allowed in a landslide hazard area subject to the standards and mitigations contained in this chapter, development standards in Chapter 21A.30 SMC, and requirements elsewhere in the SMC, when locating outside of the hazard area is not feasible;

(iii) Utility corridors may be allowed in a landslide hazard area if a critical areas study shows that such alteration will not subject the area to the risk of landslide or erosion;

(iv) Limited trimming and pruning of vegetation may be allowed in a landslide hazard area pursuant to an approved vegetation management plan for the creation and maintenance of views if the soils are not disturbed;
(v) Stabilization of sites where erosion or landsliding threatens public or private structures, utilities, roads, driveways or trails, or where erosion and landsliding threaten any lake, stream, wetland, or shoreline. Stabilization work shall be performed in a manner that causes the least possible disturbance to the slope and its vegetative cover; and

(vi) Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface that was established pursuant to City ordinances and regulations may be allowed; provided:

(A) If within the buffer, the structure is located no closer to the landslide hazard area than the existing structure; and

(B) The existing impervious surface within the buffer or landslide hazard area is not expanded as a result of the reconstruction or replacement.

(b) A landslide hazard area located on a slope less than 40 percent may be altered only if the alteration meets the following requirements:

(i) The development proposal will not decrease slope stability on contiguous properties; and

(ii) Mitigation based on the best available engineering and geological practices is implemented that either eliminates or minimizes the risk of damage, death, or injury resulting from landslides; and

(c) Neither buffers nor a critical area tract shall be required if the alteration meets the standards of subsection (5)(b) of this section.

(6) New development proposals that will result in a total site impervious surface of more than 2,000 square feet shall submit a drainage plan which complies with all applicable and project specific provisions of the King CountySDM and City of Sammamish Addendum, provide a drainage design, using the following sequential measures, which appear in order of preference:

(a) Infiltration of all site runoff shall be required to the maximum extent technically feasible in soil conditions, consistent with the infiltration system design requirements of the KCSWDM;

(b) For development proposals that cannot infiltrate all site runoff, impervious surfaces shall be infiltrated to the maximum extent technically feasible in soil conditions, consistent with the infiltration system design requirements of the KCSWDM;

(c) For development proposals that cannot infiltrate all site runoff, the applicant shall design a drainage system that provides a drainage outlet designed using the best available science techniques to limit the risk of landslide or erosion to the no-disturbance area; and
(d) Structural modification of, addition to or replacement of legally created single detached residences and improvements in existence before January 1, 2006, that do not increase the existing total footprint of the residence and associated impervious surface by more than 200 square feet over that existing before January 1, 2006, shall be exempt from the provisions of this section.

(26) The following are exempt from the provisions of this section:

(a) Slopes that are 40 percent or steeper with a vertical elevation change of up to 20 feet if:

[i] No adverse impact will result from the exemption based on the City’s review of and concurrence with a soils report prepared by a licensed geologist or geotechnical engineer; and

[ii] The development proposal complies with the adopted 2009 King County Surface Water Design Manual, as amended.

(b) The approved regrading of any slope that was created through previous legal grading activities. (Ord. O2009-250 § 1; Ord. O2005-193 § 1; Ord. O99-29 § 1)