

September 28, 2020

Lakeside Industries Attn: Karen Deal PO Box 7016 Issaquah, WA 98027

RE: Critical Areas Designation CADS19-0258, Parcel 1923069026 Status: Complete

Dear Ms. Deal:

This property has been recently reviewed for a Critical Areas Designation. Our review consisted of a site visit and an in-office review of existing background data, a Revised Critical Areas Assessment by Associated Earth Sciences, dated October 2, 2018, and a Revised Stream and Wetland Delineation Report by The Watershed Company, revised June 2020. The result of our study is that we have determined that your parcel is host to the critical areas discussed separately below. Specific impacts to development on your parcel are also discussed.

The determinations reported in this letter as to the existence, location, and classification of critical areas and critical area buffers are effective for five years from the date of this letter if there has been no change in site conditions. The Department of Local Services, Permitting Division (Permitting) shall rely on these determinations of the existence, location and classification of critical areas and critical area buffers in its review of complete applications for permits or approvals filed for the subject development site or parcel within five years after the letter is issued. If you do not plan to develop your property soon after receiving this letter, it may be in your interest to contact us to see if any of the conclusions in this letter have changed or are no longer valid.

Critical Aquifer Recharge Area (21A.24.311 to 21A.24.316)

Your parcel is within Category I and II Critical Aquifer Recharge Areas (CARAs). Because your site is greater than one acre in size, no restrictions apply for normal residential development. However, there are additional regulations that affect some commercial and industrial uses as well as the storage of certain hazardous fluids. Please consult the code sections cited above to determine if your proposed use will be impacted by these regulations.

Landslide Hazard Area (21A.24.280)

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Your property contains a potential landslide hazard area. Developments within landslide hazard areas are not allowed unless mitigation is included in the development proposal that eliminates or minimizes the hazard to permitted developments. This typically requires a geotechnical or geological assessment of the hazard, including a complete characterization of the landslide geometry and mechanism as well as recommendations for appropriate hazard mitigation. Mitigation may include changes to the development proposal (design changes or additional structures) or simply avoidance by positioning the development outside of the hazard zone. If the landslide is associated with a steep slope critical area, the steep slope regulations may also impact the development proposal.

In this case, the potential landslide hazard was considered during the geotechnical study completed by Associated Earth Sciences Inc. (AESI) as discussed in their report dated October 2, 2018. It is apparent that there are no landslide hazards that will impact development as currently configured, but we will review this again during the building permit review process.

Steep Slope Hazard Area (21A.24.310)

Your parcel contains some steep slopes. Steep slopes are defined as those slopes that exceed forty percent inclination (about 21 degrees) and have a vertical elevation change of at least ten feet. The buffer required between the steep slope and any proposed development (which is to remain unaltered native vegetation), without providing a geotechnical study, is generally 50 feet. Structures must maintain an additional 15-foot building setback beyond the buffer. Where a geotechnical study confirms that the slope is stable and that development will not create a hazard, the buffer may be reduced. For slopes that are less than 20 feet high and for slopes that are manmade or have been altered through previously legal grading, the requirements for a buffer and setback may be eliminated completely if a geotechnical study by a licensed geotechnical or geological engineer or engineering geologist finds that the slope is stable and that the development will not adversely affect (or be affected by) the slope.

The steep slopes are roughly as shown on the attached site plan. Please note that we do not have access to data that are sufficiently accurate to locate precisely the steep slopes and determine their height. For that reason, the attached map should be thought of as an approximation only.

Given the inaccuracy of the topographic data we have, including that used to generate the attached map, it may be advisable to have a topographic map created for your parcel by a licensed surveyor, using a contour interval of two feet, showing all existing clearing, grading, and the location of any existing structures and access roads. If the site plan by Triad that was submitted with your application materials did not include topography by a licensed surveyor, we would recommend that such data be acquired.

In this case, the steep slopes were considered during the geotechnical study completed by AESI as discussed in their report dated October 2, 2018. They recommend buffer/setback reductions to between

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30 and 35 feet depending upon location. Please note that critical area buffers are to be left as undisturbed native vegetation with no clearing or grading. Critical area building setbacks are everywhere 15 feet wide unless reduced through a process similar to a Variance. For this reason, it is important for AESI, the developer, and contractors to understand this difference and treat these two "setbacks" accordingly.

That said, we do not disagree with AESI's reduction recommendations, but we will require that all critical area buffers and building setbacks are shown on any site plans submitted for permit review. Pavement and uncovered aggregate storage piles are allowed in the building setback, but covered storage bins, retaining walls, and fences above a certain height may be prohibited in the critical area building setback.

Because we have reviewed and effectively approved the AESI report, no landslide hazard or steep slope buffers or building setbacks are shown on the attached map, but these will be reviewed again under the building permit application.

Erosion Hazard Area (21A24.220)

Erosion Hazard Areas are those areas that are underlain by soils that may be conducive to severe erosion when exposed. For typical single-family residence construction projects, the presence of an erosion hazard poses little impact to development proposals. There is no buffer or building setback required, and there is no impact to the proposed locations of structures, water wells, on-site septic systems, or new pavement. There may be some extra attention given to controlling storm water runoff and erosion during construction, but this would be considered during building permit review. However, for projects that would propose clearing more than 7,000 square feet of land you should confirm compliance with Chapter 16.82 of the King County Code, and for projects that would propose clearing more than 15,000 square feet of land you should confirm compliance with KCC 21A24.220.

Seismic Hazard Area (21A.24.290)

A portion of your parcel is within a possible seismic hazard area. Seismic hazards, as defined here, include areas that host foundation soils that might liquefy during an earthquake, leading to loss of bearing capacity and settling or collapse of part of the structure. It is possible to build within a seismic hazard area, but only if mitigation is incorporated into the design of the structure (usually in the form of a special foundation) that eliminates or minimizes the impact of the hazard.

In order to determine the nature of the hazard, and hence the type of mitigation, we usually require an evaluation of the development site by a geological engineer or engineering geologist. The report should be a complete assessment of soil susceptibility to seismically induced liquefaction or other seismically induced settlement. Subsurface sampling is usually done, sometimes including deep borings, and if problematic soils are encountered, the engineer recommends appropriate changes to the building plans. The presence of a seismic hazard area does NOT, however, affect the location of a septic system or water well.

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In this case, the potential seismic hazard was considered during the geotechnical study completed by AESI as discussed in their report dated October 2, 2018, and they found that a seismic hazard does exist. This may require that some form of mitigation be included in the building proposal, but we defer to AESI for further recommendations. At the time you apply for a building permit, we will review this issue again as it affects your construction proposal.

Coal Mine Hazard Area (21A.24.205)

Coal mine hazard areas typically are underlain or otherwise adversely affected by abandoned underground coal mine workings. Development is allowed within coal mine hazard areas, but only if 1) either the hazard is determined through a special study to be of a nature that would not impact structures above (usually because the abandoned workings are deep below the surface; 2) the area prone to collapse is delineated and avoided through a setback requirement; or 3) some form of mitigation is included in the development proposal that eliminates or minimizes the hazard. Such mitigation could include filling the abandoned workings or providing a foundation design that would negate the effects of any future settlement.

In this case, the potential coal mine hazard was considered during the geotechnical study completed by AESI as discussed in their report dated October 2, 2018, and they found that although there is a potential hazard on the parcel, it is limited to areas outside the proposed development and will not affect your current plans.

Wetlands (21A.24.318 to 21A.24.345)

This parcel contains all or part of several wetlands. Wetland A is Category IV with a 50-foot buffer. Wetland B is Category III with an 80-foot buffer. Wetland C is Category III with a 150-foot buffer. Wetland D is Category II with a 195-foot buffer. Wetland DD is Category III with a 150-foot buffer. The righ-tof-way wetland is Category II with a 100-foot buffer. Structures must honor an additional 15-foot building setback beyond the buffer. Within a currently undeveloped buffer, no development of any kind is usually allowed, including clearing, grading, or any other alteration of the existing vegetation. Within legally developed buffers, maintenance of existing structures and landscaping is allowed as well as limited expansions of some structures.

In this case, the wetlands and their buffers on this property have been altered by past development. Redevelopment of the site may include restoration of the wetlands and their buffers.

There is an unmapped flood plain (21A.24.230) associated with these wetlands. The elevation change between the boundary of some of these wetlands and the proposed development site is less than 10 feet based upon iMap. A minor flood study may be required to demonstrate the proposed development is not located within the flood hazard area.

Aquatic Areas (21A.24.355 to 21A.24.380)

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Your parcel is crossed by three streams. Streams A and C are Type N aquatic areas, with a 65-fooot buffer. Streams B is a Type F aquatic area with a 165-foot buffer. New Structures must honor an additional 15foot building setback beyond the buffer. Within a currently undeveloped buffer, no development of any kind is usually allowed, including clearing, grading, or any other alteration of the existing vegetation. Within legally developed buffers, maintenance of existing structures and landscaping is allowed as well as limited expansions of some structures.

In this case, the stream/aquatic areas on the low northern portion of the property have been altered by past development. Redevelopment of the site may include restoration of these aquatic areas and their buffers.

There is an unmapped flood plain (21A.24.230) associated with these aquatic areas. The elevation change between the ordinary high water mark of some of these aquatic areas and the proposed development site is less than 10 feet based upon iMap. A minor flood study may be required to demonstrate the proposed development is not located within the flood hazard area.

Wildlife Habitat Network (21A.24.385, .386, and .388)

The wildlife habitat network is defined in the King County Comprehensive Plan, and links wildlife habitat with critical areas, critical area buffers, priority habitats, trails, parks, open space, and other areas to provide for wildlife movement and alleviate habitat fragmentation. The wildlife network crosses the northwestern portion of this site, as shown on King County iMAP. The network is protected with a 300-foot wide corridor centered on the mapped network line.

Shoreline Designation (21A.25)

A small part of the northern portion of this parcel is located within Cedar River shoreline jurisdiction. The shoreline is designated Rural. Shoreline uses and modifications are regulated to provide no net loss of shoreline ecological functions. Depending on your shoreline designation and proposed project, a shoreline permit may be required. Please see KCC 21A.25.100.B for specific shoreline use regulations.

<u>Closure</u>

When you are applying to the Health Department for septic system design approval, please include a copy of this letter and any attachments with your application to them. Similarly, a copy should be included with any building permit application. This critical area determination is not based on a professional survey of the site. As a result, this CAD may be relied on for the type and general location of critical areas, but does not represent a confirmation of the precise boundaries of identified critical areas. Depending on the scope and type of development proposed on the site, a survey may be required with a permit

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application. If additional critical areas that are not reflected in the CAD become known during permit review, the development would still need to comply with applicable critical areas regulations.

The purpose of this review is to determine the location and classification of critical areas on your site that might affect your proposed development activities, and is not an approval of existing or proposed development. Additional reviews, including but not limited to drainage, floodplain, shorelines, clearing, grading, compliance with critical area codes, and fire flow may occur during the building permit review process.

NOTE: We can approve the Associated Earth Sciences report dated October 2, 2018 for planning purposes, but please note that when you apply for a building or land use permit, we will review again the geotechnical issues as they pertain to your final plans. We will also require that all final plans be submitted to AESI for their review and confirmation that your plans meet all of their recommendations. In addition, please be sure to show all critical areas, critical area buffers, and critical area building setbacks on any site plans submitted for our review.

Please feel free to contact me at 206-477-0368 or <u>laura.casey@kingcounty.gov</u> if you have any questions.

Sincerely,

Hame C. Carry

signed electronically

Laura Casey Environmental Scientist III - Ecologist

Attachments: Geological Critical Areas Site Map Ecological Critical Areas Site Map

Cc: Ty Peterson, Commercial and Resource Product Line Manager Fereshteh Dehkordi, Project/Program Manager III



