

Appendix I

Sample Geological Hazards Assessment Review Checklist

The following checklist may be used by the jurisdiction's staff to assist them in their review of geological hazard assessments that are submitted as part of a critical areas report. The checklist is a way of ensuring that the necessary components of the assessment have been included. The checklist can also be used as a tool for communicating needed corrections to the applicant. This checklist is based on the Pierce County checklist developed in 1999 as modified by GeoEngineers, Inc., for the City of Kent in 2002.

Project Name: _____ Date: _____

Application No.: _____ Geotechnical Engineer: _____

Professional Liability Insurance Certificate on File: _____

Circled items need to be addressed. Checked items are O.K.

Return All Review Mark-Ups and Checklist With Resubmittal:

Items 1 through 31 are the minimum requirements to be addressed by the geotechnical engineer. All remaining items are required to be completed by the applicant or their agents prior to permit approval.

1. _____ Report stamped and signed by P.E.
2. _____ Contour map of area, showing existing contours, at a maximum scale of 1"=20' and with 2" contour interval.
3. _____ Delineation of 15 – 39 percent slopes on maps with the report.
4. _____ Delineation of slopes greater than 40 percent on maps with the report.
5. _____ Boring or test pit logs included. (Septic test pits are not acceptable.)
6. _____ Exploration methods described and justified.
7. _____ Soil and/or rock stratigraphy described.
8. _____ Ground water levels and estimated or measured seasonal variations.
9. _____ Description of any prior site grading.
10. _____ Description of any on and near site soil instability.
11. _____ Description of any on and near site slope failure.
12. _____ Submittal of data concerning the vulnerability of the site to seismic events.
13. _____ Slope stability studies and opinion of slope stability both in static and seismic events.
14. _____ Proposed angles of cut and fill.
15. _____ Site grading requirements.
16. _____ Structural foundation requirements.
17. _____ Estimated foundation settlement.
18. _____ Soil compaction criteria.
19. _____ Proposed surface water drainage.
20. _____ Proposed subsurface water drainage.

21. _____ Lateral earth pressures.
22. _____ Vulnerability of the site to erosion.
23. _____ Suitability of on-site soil for fill.
24. _____ Specifications for import fills.
25. _____ Lab data and soil index properties.
26. _____ Building limitations.
27. _____ Discussion on whether or not wet weather construction is feasible.
28. _____ Report is less than five years old for the site.
29. _____ Required buffer and setback from toe: _____ Feet.
30. _____ Required buffer and setback from top: _____ Feet.
31. _____ Required buffer and setback from flank: _____ Feet.

Narrative Addressing the Following Issues:

1. _____ Is the development located to minimize disturbance and removal of vegetation?
2. _____ Are structures clustered (where possible) to reduce disturbance and maintain natural topographic character?
3. _____ Development conforms to the natural contours.
4. _____ Foundations tiered (where possible) to conform to existing topography.
5. _____ Development designed to minimize building footprint and disturbed area.
6. _____ Development designed to minimize impervious surface coverage.
7. _____ Roads, walks, and parking designed to parallel natural contours.
8. _____ Access located on least sensitive area of site.

Notification Requirements:

1. _____ Buffer placed in a critical area tract, protective easement, land trust dedication or other Department approved mechanism.
2. _____ Letter from engineer stating that the edge of the buffer(s) and setback(s) have been clearly staked, flagged and fenced (see attached detail) prior to any site clearing or construction.
3. _____ Title notification recorded for landslide and/or erosion and/or seismic hazard area.

Erosion Hazard Area Requirements:

1. _____ Erosion hazard is present if site has a USDA designation of: moderate-severe, severe or very severe SCS soil type SCS hazard designation.
2. _____ Abbreviated Erosion/Sediment Control plan needed.
3. _____ Full Erosion/Sediment Control plan needed.

Storm Drainage Requirements:

1. _____ Abbreviated Drainage plan meeting geotechnical recommendations.
2. _____ Full Drainage plan meeting geotechnical recommendations.
3. _____ Letter from engineer stating that drainage plan meets geotechnical recommendations.

Private Inspection:

1. _____ Letter of inspection by the geotechnical engineer verifying compliance with the approved report prior to footing and/or foundation inspection approval.
2. _____ Letter of inspection by the geotechnical engineer verifying installation of erosion control facilities.
3. _____ Storm drainage certification letter by the civil engineer prior to final building inspection approval.