

Land Use Planning Division 1600 SE 190<sup>th</sup> Ave, Ste 116 Portland OR 97233 Ph: 503-988-3043 Fax: 503-988-3389 multco.us/landuse Geologic Hazards Permit (GH) Work Sheet

Associated Active Cases:

**Instructions for Applicants:** 

This questionnaire has been put together to assist you in preparing an application for development within the Geologic Hazards Overlay. While not required, we encourage you to consult with an Oregon licensed Certified Engineering Geologist or Geotechnical Engineer when completing this form. Information in this worksheet is intended to supplement the Geotechnical Report or Geotechnical Reconnaissance Survey [GHP Form 1]. The responses and supporting documents you provide will be the basis for determining whether or not your application satisfies the Geologic Hazards criteria.

## **GENERAL INFORMATION**

Project Description:	
Site Address or Legal Description:	Average Slope of Property (%):
Maximum Slope on Property (%):	Area in which it is located:
Surface area disturbed (square feet and acres)*:	Volume of excavation/fill (yd <sup>3</sup> ):
	Completed By:
	Date:

\*Construction activities disturbing between 1 and 5 acres are automatically covered under the Oregon (DEQ) Department of Environmental Quality (NPDES) National Pollutant Discharge Elimination System Stormwater Discharge General Permit No.1200-CN. This relieves many applicants from also having to apply for a DEQ permit. Activities disturbing over 5 acres are not eligible for automatic coverage and are subject to additional permitting requirements by DEQ under the 1200-C program. Please ask the planning office for a copy of the "GENERAL PERMIT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER DISCHARGE PERMIT" provisions for more information on projects qualifying for automatic coverage.

## SUBMITTAL REQUIREMENTS

This worksheet has been put together to assist you in addressing approval criteria. Additional information is required to submit an application. This includes but is not limited to a General Application Form, deeds, title report and information listed in Multnomah County Code, MCC section 39.5085 (outside the Columbia River Gorge National Scenic Area) / 38.5515 (inside the Columbia River Gorge National Scenic Area). Please reference the Geologic Hazards regulations for a full list of submittal and site plan requirements.

## **GEOTECHNICAL ANALYSIS**

In addition to demonstrating compliance with the GHP Approval Standards (MCC 39.5090 / 38.5520); A Geologic Hazards Permit may be approved by the County only after the applicant provides one of the following. Please check the applicable box.

□ Topographic information is enclosed showing the proposed development to be on land with average slopes less than 25 percent, and located more than 200 feet from a known landslide, and that no cuts or fills in excess of 6 feet in height are planned. High groundwater conditions shall be assumed unless documentation is available, demonstrating otherwise; or

- □ A geotechnical report prepared by a Certified Engineering Geologist or Geotechnical Engineer is attached certifying that the site is suitable for the proposed development. The report includes any specific investigations required by the County and recommendations for any further work or changes in proposed work which may be necessary to ensure reasonable safety from earth movement hazards; or
- □ A GHP Form-1 completed, signed and certified by a Certified Engineering Geologist or Geotechnical Engineer with his/her stamp and signature affixed has been prepared indicating that the site is suitable for the proposed development.

*NOTE:* If the GHP Form– 1 indicates a need for further investigation, or if the Director requires further study based upon in-formation contained in the GHP Form– 1, a geotechnical report as specified by the Director shall be prepared and submitted.

## GHP APPROVAL STANDARD SUMMARY

The information below summarizes **the most common** development standards. County approval of development plans must be based upon findings that the proposal adequately addresses the standards of approval. Some of the standards can be satisfied by checking the corresponding box. By checking a box, you are confirming that the statement applies to your project. The full list of approval standards can be found in MCC 39.5090 / 38.5520. <u>Depending on your proposal</u> <u>details, your staff planner may ask for more information to confirm all approval standards are met</u>.

- 1. Fill materials, compaction methods and density specifications shall be indicated. Fill areas intended to support structures shall be identified on the plan.
  - □ The fill materials, proposed fill volume (cubic yards), compaction methods and density specifications are included on the site plan or are described below. Fill areas intended to support structures are identified on the plan (Note: The total cumulative deposit of fill on the site for the 20-year period preceding the date of application shall not exceed 5,000 cubic yards. Fill shall be composed of earth materials only)
  - There is no fill included in the proposed project.

2. Cut and fill slopes shall not be steeper than 3(H):1(V) (i.e. 33%), and unsupported cuts or fills greater than 4-feet in height shall not be allowed unless a geological and/or engineering analysis certifies that the steep slopes are safe.

Cut or fill slopes described above have been certified as safe in the attached geological and/or engineering analysis and suitable for the development.

Note: This issue is specifically addressed in the GHP Form 1 and you can rely upon the response by the Certified Engineering Geologist or Geotechnical Engineer that completed the form. A geotechnical report may or may not address the issue. If you need to prepare a response, please make sure to address any earthwork that is to occur close to a property line or storm run-off that will discharge off the property.

There are no cut or fill slopes steeper than 33%, including any unsupported cuts or fills greater than 4-feet in height.

- **3.** Fills shall not encroach on any water body unless an Oregon licensed Professional Engineer certifies in writing that the altered portion of the waterbody will continue to provide equal or greater flood carrying capacity for a storm of 10-year design frequency.
  - □ The necessary certification has been provided.
  - There is no fill proposed which will encroach on any water body.
- 4. Fills generated by dredging may be deposited on Sauvie Island only to assist in flood control or to improve a farm's soils or productivity, except that it may not be deposited in any SEC overlay, WRG overlay, or designated wetland;

Fill generated by dredging as described above is proposed and the fill will meet the standard as described below

Fills generated by dredging are not proposed.

5. On sites within the Tualatin River Drainage Basin, specific stormwater and erosion control standards apply. The Basin includes unincorporated rural areas west of Skyline Boulevard.

- The development site is outside of the Tualatin River Drainage Basin (skip to standard #6).
- The site is within the Tualatin River Drainage Basin and:
  - Measures for controlling erosion and stormwater have been designed to perform as prescribed by the currently adopted edition of the City of Portland Erosion and Sediment Control and Stormwater Management Manuals; and
  - The stormwater system has been designed to manage runoff onsite to the maximum extent possible; and
  - Land-disturbing activities are at least a 100-foot from the top of the bank of a stream or ordinary high watermark (line of vegetation) of a water body, or a mitigation plan consistent with OAR 340-041-0345(4) is enclosed for alterations within the buffer area.

(Note: For the mitigation plan, the County utilizes vegetated corridor provisions contained in Clean Water Services Design and Construction Standards manual. A copy of the manual is available on their website at <u>http://www.cleanwaterservices.org</u>. On slopes less than 25 percent, land disturbing activities can be approved to within 50 feet of a water body provided at least 80 percent of the intervening area is planted with native trees, shrubs, and groundcover that will achieve at least 50% canopy coverage at maturity. Mitigation must occur at a minimum 1:1 ratio to disturbed areas. If your site does not fall within these parameters, other options may exist which you can discuss with our staff.)

6. Stripping of vegetation, ground disturbing activities, or other soil disturbance shall be done in a manner which will minimize soil erosion, stabilize the soil as quickly as practicable, and expose the smallest practical area at any one time during construction. Please explain how the proposed development meets this standard.

<sup>7.</sup> Development Plans shall minimize cut or fill operations and ensure conformity with topography so as to create the least erosion potential and adequately accommodate the volume and velocity of surface runoff. Please explain how the proposed development meets this standard.

. Tei	<b>nporary vegetation and/or mulching shall be used to protect exposed critical areas during development.</b> ( <i>Note: Critical areas are typically soils that if exposed are likely to erode into drainageways or onto roads or nearby properties.</i> )
	The attached erosion and sediment control plan includes the use of temporary vegetation and/or mulch to protect exposed soils.
	There will be no exposed critical areas. Please explain
	nenever feasible, natural vegetation shall be retained, protected, and supplemented. Please explain how th pposed development meets this standard.
Als	so, check one of the following:
	The site plan provided shows that a 100-foot undisturbed buffer of natural vegetation will be retained from the top of the bank of a stream, or from the ordinary high watermark (line of vegetation) of a water body, or wetland; or
	Development will encroach within the 100 foot buffer. A mitigation plan is enclosed utilizing erosion control and stormwater measures prescribed by the currently adopted edition of the City of Portland Erosion and Sediment Control and Stormwater Management Manuals. The plan further meets surface water quality equivalent to those established for the Tualatin River Drainage Basin in OAR 340-041-0345(4).
10.	Permanent plantings and any required structural erosion control and drainage measures will be installed as soon as practical. Please explain how the proposed development meets this standard.

11. Provisions shall be made to effectively accommodate increased runoff caused by altered soil and surface conditions during and after development. The rate of surface water runoff shall be structurally retarded where necessary. Please explain how the proposed development meets this standard.

- 12. Sediment in the runoff water shall be trapped by use of debris basins, silt traps, or other measures until the disturbed area is stabilized.
  - □ The site plan provided includes debris basins, silt traps, or other measures (specify:\_\_\_\_\_) which will be installed and maintained until the disturbed areas are stabilized.
  - The development will not generate sediment laden run-off to warrant the installation of these measures. Please explain:

13. Provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills by installation of temporary or permanent drainage across or above such areas, or by other suitable stabilization measures such as mulching or seeding. Please explain how the proposed development meets this standard.

- 14. All drainage provisions shall be designed to adequately carry existing and potential surface runoff to suitable drainageways such as storm drains, natural watercourses, drainage swales, or an approved drywell system.
- Drainage improvements shown on the site plan have been designed to carry existing and potential surface runoff to the following drainageway:
- □ No drainage improvements are associated with the development.

15. Drainage swales used to divert surface water shall be vegetated or protected to minimize erosion.

Drainage swales are being used and will be protected to minimize potential erosion. Method of protection:

□ No drainage swales will be installed.

- 16. Erosion and sediment control devices must be utilized such that no visible or measurable erosion shall occur on-site and no visible or measurable sediment shall exit the site, enter the public right-of-way or be deposited into any water body or storm drainage system. These may include, but are not limited to:
  - Energy absorbing devices to reduce runoff water velocity;
  - Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule;
  - Dispersal of water runoff from developed areas over large undisturbed areas.

	Erosion and sediment control devices of this type are being employed to prevent pollution discharges as shown on the site plan. No devices are needed to prevent pollution discharges from occurring. Please explain:
17.	Disposed spoil material or stock-piled topsoil shall be prevented from eroding into waterbodies (see 39.2000 for definition) by applying mulch or other protective covering; or by location at a sufficient distance from waterbodies; or by other sediment reduction measures.
	As noted on the plan, stockpiled spoils or topsoil will be covered and are located such that they will not erode into nearby streams or drainages.
	Spoil material or topsoil will be removed as it is excavated and will not be stored on-site.
18.	Such non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters shall be prevented from leaving the construction site through proper handling, disposal, continuous site monitoring and clean-up activities. Please explain how the proposed development will meet this standard.
19.	Ground disturbing activities within a water body shall use instream best management practices designed to perform as prescribed in the City of Portland Erosion and Sediment Control Manual. Please explain how the proposed development will meet this standard.

20. The total daily number of fill haul truck trips shall not cause a transportation impact, unless mitigation is approved. Fill trucks shall be constructed, loaded, covered or otherwise managed to prevent any of their load from dropping, sifting, leaking, or otherwise escaping from the vehicle. No fill shall be tracked or discharged in any manner onto any public right-of-way. Please explain how the proposed development will meet these standards.

21. No compensation, monetary or otherwise, shall be received by the property owner for the receipt or placement of fill. Please explain how the proposed development will meet this standard.

22. On sites within the Balch Creek Drainage Basin, land disturbing activities are limited to the period between May first and October first of any year. All permanent vegetation or a winter cover crop shall be seeded or planted by October first of the same year the development was begun; all soil not covered by

buildings or other impervious surfaces must be completely vegetated by December first of the same year the development was begun. The following is a map depicting the boundaries of the Balch Creek Drainage basin.

- □ The property resides within the Balch Creek Drainage basin. This application has been tailored with the understanding that land disturbing work will be limited to the period between May 1<sup>st</sup> and October 1<sup>st</sup> and that cover crops must be established within this timeframe.
- The property is not located within the Balch Creek Drainage Basin.

