

A geotechnical report (the “report”) is required to confirm that the land may be used safely for the use intended without creating an unnecessary risk of hazards. The Report must be completed at the cost of the applicant by a qualified professional.

The Qualified Professional (QP) is a professional engineer or professional geoscientist with training or experience in geotechnical study and geohazard assessments, licensed to work in the province of British Columbia and can provide proof their professional liability insurance provides them coverage for this field of work. Note that a QP is a professional engineer or professional geoscientist experienced in geotechnical engineering and expertise in river engineering and hydrology for the purpose of floodplain determinations.

The QP is responsible for inspecting the subject property and supervising geotechnical investigations on site.

REPORT DETAILS

The report must include the following:

1. Clearly identify the subject property by citing legal address and civic address (if assigned), provide a topographic and geomorphic description of the property including a statement as to any hazards which may affect the safe development of the land including, but not limited to:
 - a. Erosion
 - b. Rockfalls
 - c. Ground water flows
 - d. Landslide (land slip)
 - e. Subsidence
 - f. Avalanche
 - g. Steep slope
 - h. Earthquake
 - i. Flooding
2. Provide a review of previous geotechnical studies affecting the site and/or engineering work in the vicinity or on scientifically relevant sites elsewhere.
3. Provide recommendations to reduce the risk of damage to the land, buildings, and works and services in regards to:
 - a. identify any natural areas that should not be developed or built upon (including removal of vegetation) including steep slopes and floodplain due to unacceptable risk levels on a map or site plan.
 - b. restricting the use of the land, buildings, or works and services;
 - c. remediating any unstable or potentially unstable soils;
 - d. further geotechnical investigations and reports which may be required;
 - e. identifying any part of works and services which require inspection by specialized personnel and outline a recommended inspection program at time of land development; and
 - f. further reports during the maintenance period.
4. Assess the proposed development for the property using relevant City bylaws such as the Building Bylaw (for hazardous areas), the Zoning Bylaw (for floodplain restrictions and stream setbacks) and the Development Permit guidelines and future land use designations of the Official Community Plan to determine the suitability of the land to accommodate the proposed use.

5. Establish safe setback distances from any watercourses, steep slopes, or hazard areas to protect the land, buildings, and residents from risk of injury or damage that may, in the qualified professional's opinion, be created by hazards such as flooding, mud flows, debris flows, debris torrents, erosion, land slip, ground water flows, rock fall, subsidence, avalanche, earthquake, or any combination thereof. The recommended setback must not diminish the minimum setback requirements as set out in City bylaws.
6. Quantify the risks of a geotechnical failure or any substantial hazard.
7. Certify that "the land is safe for the use intended" and clearly identify the use and reference any development plans being certified if appropriate.

RECOMMENDATIONS AND REPORT CONCLUSIONS

The Qualified Professional's Recommendations and Report Conclusions Must:

1. Recognize that the City, its Approving Officer, and Building Inspectors may rely on the Report when making decisions regarding the application for land development;
2. Be submitted with an endorsed Landslide Assessment Assurance Statement (Appendix D of the Association of Professional Engineers and Geoscientists of British Columbia's (APEGBC) "Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia";
3. Identify any insufficiency in the design of buildings; proposed water, sewer, drainage, access and road works; or construction standards intended for the development; and
4. Prescribe the geotechnical works and any changes in design standards for the development which are required to:
 - a. ensure the land, buildings, and works and services are developed safely for the use intended; and
 - b. Maintain the safety of the land, buildings, and any works and services as a condition of development approval.

The Report must be registered as a Section 219 Covenant on title under a priority agreement prior to building or development approval.

FIND A QUALIFIED PROFESSIONAL

"Qualified Professional", for the purposes of geotechnical assessments, means a professional engineer, or a professional geoscientist with experience or training in geotechnical study and geohazard assessments. There are a number of engineering firms that can be located in the Yellow Pages of the phone book or online. In addition, you can contact the Association of Professional Engineers and Geoscientists of BC at 1-888-430-8035 or apeg.bc.ca. The City is unable to recommend a qualified professional due to conflict of interest.

REGISTRATION OF A COVENANT/APPLICATION

Registration of a covenant and/or application approval does not warrant or represent that the land may be developed and used safely without risk of hazard damage. Notwithstanding registration of a covenant, an updated Report could be required by the City if land conditions change or if some other conditions arise which are significantly different than those anticipated by the existing Report.