



Construction in Geologically Hazardous Areas

Step 2 – Design Review / Permit Issuance

Geotechnical Analysis Form to be completed by a **State of Washington Licensed Engineer** qualified in the specialty of Geotechnical Engineering and submitted with a COBI Construction Permit Application. This form shall either be attached as part of an updated Geotechnical Report bearing the Engineer’s seal or submitted with the Engineer of records seal and signature below.

PROJECT INFORMATION

Project Name: _____

Permit Number: _____

Applicant Name: _____ Applicant Phone: _____

Project Address/Location: _____

Engineer’s Name: _____ Engineer’s Seal:

Engineer’s Phone: _____

Engineer’s Signature: _____

Date: _____

This form is required prior to the issuance of the permit. At the time of permit issuance, the recommendations of the Geotechnical Engineer are required to be incorporated into the project plans. This form is to facilitate your assurance that you have reviewed the plans and found them in compliance with your recommendations.

1. PLAN REVIEW

“I have reviewed the plans and design elements related to the Geotechnical aspects of the project and have observed field staked locations of proposed structures subject to the recommendations of the Geotechnical Report. I have found the plans, design and locations to be in general accordance with the recommendations of the Geotechnical Report.”

I Agree With the Above Statement Initial: _____

State any variations from your original recommendations in implementing these plans:

2. IMPLEMENTATION OF RECOMMENDATIONS

In accordance with Chapter 16.20.130 of the City of Bainbridge Island Municipal Code, the Geotechnical Engineer must be able to make the following statements regarding implementation of their recommendations in the plans. Concurrence with the following statements shows that they meet the requirements of the City of Bainbridge Island Municipal Code; please initial each of the below statements if you fully concur that they have been met in your professional opinion:

- a. *The proposed activity shall not create a net increase in geological instability, either on-site or off-site, which is defined as follows:*
 - i. *The subject parcel shall not be less stable after the planned development than before; and*
 - ii. *The adjacent parcels shall not be less stable after the planned development than before.*

Initial: _____

- b. *The proposed activity shall not increase the risk of life safety due to geological hazards above professionally acceptable levels**

Initial: _____

- c. *The proposed activity shall not increase the risk due to geological hazards above professionally acceptable levels* for:*

- i. *Property loss of any habitable structures or their necessary supporting infrastructure on-site; or*
- ii. *Risk to any off-site structures or property of any kind.*

Initial: _____

- d. *Proposed buildings shall be constructed using appropriate engineering methods that respond to the geological characteristics specific to the site in order to achieve the highest standard of safety feasible**.*

Please explain how this requirement has been met:

Pursuant to BIMC 16.20.130, the City Engineer will generally accept:

*a "professionally acceptable level" of risk as a static factor of safety of 1.5 for new construction or 1.25 for remodel, and a seismic factor of safety of 1.0 for the design earthquake (using the USGS 2002 probabilistic ground motion values for 2% in 50 years)

**the "highest standard of safety feasible" has been achieved if all buildings are designed to meet the IBC as appropriate to withstand all events up to the above defined "professionally acceptable level" of risk and a reasonable explanation is provided.

3. LEVEL OF RISK

The Engineering Department requires the Geotechnical Engineer to communicate the overall risk of failure and impact to the proposed structures in a quantified manner, along with the level of certainty in this quantification. This quantification may be a factor of safety or some other quantification acceptable to the City Engineer and needs to communicate to the owner (and future owners) an understandable, estimated, or calculated risk to or from their proposed activities or structures in some relevant time frame (often the lifetime of the structure).

Please provide your determination of the above required level of risk here:

4. STORMWATER

a. Landslide Hazard Areas or Erosion Hazard Areas

- I confirm that the Erosion and Sediment Control Plan in the application dated _____ is in accordance with my recommendations
- Not applicable to this application

b. Landslide Hazard Areas, Erosion Hazard Areas, or Areas of Influence

- I confirm that the Surface & Stormwater Management Plan in the permit application dated _____ is in accordance with my recommendations.
- Not applicable to this application

5. SPECIAL CONDITIONS

Address any special Geotechnical conditions requested by the City after the City's review of the Geotechnical report and permit application forms here (attach more sheets as needed and any supporting documentation):