Hillside Residential Addition, Alteration & Accessory Building Submittal Requirements

Construction in hillside areas must comply with the Hillside Ordinance.

The following information and proof of ownership (including parcel number) must be submitted for plan review. Without this information, your submittal will not be processed and/or may delay permit issuance.

Submittal Requirements
One (1) copy of all drawings must be submitted. Plans must be legible and drawn to scale on a minimum of 8½” x 11” paper. (Plans larger than 11” x 17” require three (3) sets of plans). The scale must be noted on the drawings.

• #406 - Residential Addition, Alteration & Accessory Building Application
• Site plans: scaled at 1 inch = 20 feet -or- 1/8 inch = 1 foot
• Floor plans: scaled at 1/4 inch = 1 foot or larger
• Elevations (as needed): scaled at 1/8 inch = 1 foot or larger
• Grading & Drainage Plan, one (1) additional plan for Public Works

If you need assistance preparing your plans, consult with a residential designer or architect.

2006 International Residential Code/Energy Code Compliance
As of January 1, 2008, all construction must meet the 2006 International Residential Code which includes energy compliance provisions. The three options for energy code compliance are the two Component Method for Climate Zone 5 approaches found in 2006 IRC Chapter 11, or the Performance Method, using the REScheck program. At the time you apply for your building permit, the minimum requirements of the Component Method IRC Table N1102.1 will be followed, unless your application includes a REScheck program.

Required Drawings

1. Site Plan: Provide a plan to show property dimensions in conformance with the recorded plat. Show easement locations. Call out adjacent street names. Show location of existing structure/s and the new proposed addition or accessory building. Indicate the distance in feet to property lines and other buildings measured from the walls. Show all driveways and indicate if they are paved or gravel.

2. Floor Plan: Provide one floor plan for each level affected. Show the use of all new and existing rooms or use of accessory structure/s. Show locations and sizes of windows and doors. If addition is a 2nd story floor, show all bearing locations on lower levels through the foundation. Show braced wall panel locations and types. Show stair details and plumbing fixtures. All framing members are to be specified including beams, headers and support posts. (This information may be incorporated with the site layout plan if addition or accessory structure is one story.)

3. Cross Sections: Building cross sections which show a cut through the building from the bottom of the foundation through the roof and showing location of existing footing/ foundation. Typical cross sections call out footing sizes, anchor bolt size and spacing, mud-sill, insulation for the foundation perimeter, wall and ceiling insulation, stud size and spacing, wall sheathing, damp proofing, siding, interior wall covering, vapor barrier, wainscoting, roof rafter or truss design (from top plate to eave), attic ventilation path, roof sheathing and size and type of roofing to be used. (A fill in the blank type handout is available at the Plan Review desk for most typical construction. If yours is different, provide a custom drawing.)

4. Elevations (As needed): All sides of the structure shall be shown. The elevation drawings must be detailed and dimensioned, including doors, windows, light fixtures, etc. Drawings should include a dashed line indicating the location of bracing and shear walls.
Basements Under Existing Dwelling

Basements under existing dwellings have additional submittal requirements as listed below.

1. **Structural Analysis of Existing Dwelling:** A structural analysis of the existing dwelling may be required. Contact the Plan Reviewer for more information.

   1. **Foundation Plan:** Show all concrete footings, piers, foundation/basement wall sizes and locations, and reinforcement. Indicate floor-framing layout for the floor above and all supporting members sized, including columns, beams, floor-joists and cripple walls (All interior bearing points from upper floors and roof to be located and sized). Describe the method for dampproofing. New basement wall/footings, which are not a prescriptive code design will require supporting engineering. Engineering is required to be stamped and signed by an Idaho licensed engineer.

   2. **Cross Sections:** Building cross sections which show a cut through the building from the bottom of the foundation through the roof and showing location of existing footing/foundation, new basement wall and all different building assemblies (may require more than 1 drawing). Typical cross sections call out footing sizes, anchor bolt size and spacing, mud-sill, insulation for the foundation perimeter, wall and ceiling insulation, stud size and spacing, wall sheathing, damp proofing, siding, interior wall covering, vapor barrier, wainscoting, roof rafter or truss design (from top plate to eave), attic ventilation path, roof sheathing and size and type of roofing to be used.

3. **Floor Plans:**
   - **Existing:** Floor plans for all existing floors must be provided with each room designated as to the use. Plans must include locations of all walls and beams/supporting elements, window and door sizes and locations, existing stairs, decks, porches, fireplaces (and types) and plumbing fixtures.
   - **New:** New framed wall and beam locations are to be called out for all new construction. Indicate how all interior framed walls and exterior furred out walls are to be fire blocked. Ceiling height must be shown and must comply with IRC. Details must include interior and exterior stair locations to the basement, window locations and sizes, and header sizes above all openings. Perimeter opening sizes must meet the minimum requirements for compliance with natural light, ventilation and egress. New stairs and railings must comply with IRC.

**Hillside Areas Additional Submittal Requirements**

1. **Engineered Soils Report:** The Engineered Soils Report must be submitted with the plans and specifications when applying for a building permit.

2. **Engineered Foundation Design:** The Engineered Foundation Design must be submitted as part of the plans and specifications when applying for a building permit.

3. **Engineered Site Grading and Drainage Plan:** The Engineered Site Grading and Drainage Plan must be submitted as part of the plans and specifications when applying for a building permit. The Building Division approves the plan, with review assistance from the Public Works Department.

4. **Engineered Retaining Walls:** All retaining walls over four feet in height must be designed by a State of Idaho licensed structural engineer. Retaining wall height is measured from the bottom of the footing to the top of the wall.
   - **Note:** When more than one retaining wall is planned and the horizontal distance between retaining walls is less than ten (10) feet, and the sum total of all retaining walls exceeds four (4) feet in height, then those retaining walls must also be designed by a structural engineer.
   - Engineered Retaining Wall designs must be submitted for review and approval prior to scheduling any retaining wall inspections.

5. **Erosion & Sediment Control Plan.** An Erosion & Sediment Control (ESC) plan is required for all residential construction within Boise’s designated Hillside Area. The plan must be included in the building permit plan set, reviewed and approved by the City prior to the start of any earth disturbing activity. The ESC plan must be prepared or approved by an individual who has successfully completed a City-approved Plan Designer Construction Site Erosion and Sediment Control training program.
Engineered Soils Report Requirements

A site specific soils investigation must be conducted by a State of Idaho Licensed Engineer qualified in soil classification and investigation. The soils report shall be prepared, stamped and signed by the licensed soils engineer in accordance with the 1997 Uniform Building Code (UBC) Appendix Chapter 33 and should contain the following information:

1. A plot plan showing the location of all test borings and/or excavations.
2. Description and classification of the materials encountered.
3. Elevation of the water table, if encountered.
4. Recommendations for foundation type and design criteria including bearing capacity, provisions to minimize the effects of expansive and collapsible soils and the effects of adjacent loads.
5. Expected total and differential settlement.
6. Data regarding the nature, distribution and strength of existing soils.
7. Conclusions, opinions and recommendations covering the adequacy of the site to be developed as proposed in the construction and grading plans, including the stability of slopes.
8. Recommendation for foundation and retaining wall drain systems as well as roof drain runoff and sprinkler systems.
9. Specify type of damproofing for foundation walls enclosing basement areas below grade, as per the International Residential Code (IRC).

Engineered Foundation Design Requirements

All foundations within hillside areas must be prepared, stamped and signed by an Idaho Licensed Structural Engineer, designed in accordance with the International Building Code (IBC) as required by Boise City Code, and include the following information:

1. The foundation shall be designed using the applicable information from the soils report. The foundation plans should reference the engineering company, soils report number and date of the report used in designing the foundation.
2. Indicate the foundation footing and wall sizes as well as the reinforcing required for the loads imposed.
3. When the walls and/or footings are to be stepped, indicate the top of footing and top of wall elevations in the same datum as shown on the grading plan.
4. All foundations shall be located at a distance from the top and/or toe of slope or portion thereof on the individual lot in accordance with the IRC, or as demonstrated by an engineered design that the intent of this section has been met (See Figure R403.1.7.1 below). The distances are measured horizontally from the face of the footing.
5. Designate all walls on foundation plan to correspond with engineering designs. Note: All engineered foundation design requirements are to be incorporated into the foundation drawing, which must be stamped by the designing engineer. A generic foundation wall design attached to the plans will not be accepted.
Engineered Site Grading and Drainage Plans and Specification Requirements

All Engineered Grading and Drainage Plans shall be drawn to scale and shall be of sufficient clarity to indicate the nature and extent of work proposed, and show in detail that they will conform to the provisions of the Boise City Hillside Ordinance, the applicable subdivision overall drainage plan, and the 1997 Uniform Building Code Appendix Chapter 33.

The plans shall indicate the location of the work, the name of the lot owner and the name of the designing engineering company. The plans and specifications shall be prepared, stamped and signed by a State of Idaho Licensed Civil Engineer.

The plans shall include the following information:

1. A general vicinity map for the proposed site.
2. Property limits and accurate contours (at two foot intervals) of existing ground and details of terrain and area drainage.
3. Limiting dimensions, elevations and finish contours (at two foot intervals) to be achieved by the grading, and proposed drainage channels and related construction.
4. Detail all surfaces, subsurface and roof drainage devices; as well as retaining walls, cribbing, dams, and other protective devices to be constructed as part of the proposed work. Indicate the drainage area and the estimated runoff of the area served by any drains. If subsurface disposal is proposed, provide basis for drain field design.
5. Specifically address the manner and maintenance of revegetation. Note: Required vegetation not installed before final inspection requires a bond.
6. Location of any buildings/structures on the subject property, plus any buildings/structures on adjacent property owner’s land (if within 15 feet of the subject property) or if it may be affected by the proposed grading operations.
7. Indicate the location of existing subdivision drainage systems complete with locations of existing storm drains, interceptor drains, area drains, etc. that will be used by the lot drainage system. Note: The project engineer should consult all subdivision drainage plans. The soils report must insure the established overall subdivision drainage system is maintained. Reference the individual lot requirements. The project engineer may wish to consult with the subdivision engineer and/or the Boise City Engineer with the Public Works Department.
8. Indicate the setback distance of slopes and/or cuts and fills from boundaries (individual lot property...
lines) to show compliance with the requirements of the 1997 Uniform Building Code Appendix Chapter 33 and Figure A-33-1 (See page 4).

9. Specify the quantity (cubic yards) of the proposed excavation. Indicate the amount of excavated material to be removed from the site and/or the amount of excavated material to be used as fill on the site (Identify the location where any exported excavation material will be moved to).

10. Indicate the location of any proposed cuts or fills and specify the proposed elevations of the cuts and fills. Specify the soils to be used as fill material.

11. Provide detailed sections of the means of stabilizing of the sloped fill, such as benching, terracing, retaining walls, etc. Specify manner of ground preparation of the existing slopes to receive fill, as well as soil cohesion and compaction requirements.

**Soils Engineer**

The Soils Engineer shall do the professional site inspection and approval concerning:

- The preparation of ground to receive fills,
- Testing for required compaction,
- Stability of all finish slopes and
- The design of buttress fills where required.

If, in the course of the inspection, the soils engineer finds that the work is not being done in conformance with the approved plans, the discrepancies shall be reported in writing to Planning & Development Services (PDS). Recommendations for corrective measures, if necessary, shall be submitted.

The final inspection of the site grading and drainage work shall be performed by the Designing Engineer. An approval letter, stamped and signed by the inspecting engineer, shall be submitted to PDS prior to issuance of the Building Final. The approval letter shall be specific in addressing the accuracy of the final grading and drainage of site work. The letter should indicate:

1. That all surface, subsurface, roof drainage and any other drainage crevices called for on the grading and drainage plan have been installed and function properly.
2. All final grading contours are true to line and accurate in accordance to the approved grading and drainage plan. If on-site modifications are required to the approved plan, then a revised stamped grading and drainage plan reflecting those changes must be submitted with the approval letter. Any changes may require additional hillside development approval from Planning & Zoning.

A bond may be required as per Appendix Sec. 3311 of the 1997 Uniform Building Code in such form and amounts as may be deemed necessary to assure that the work, if not completed in accordance with the approved plans and specifications, will be corrected to eliminate any hazardous conditions. This includes required revegetation.

**Erosion & Sediment Control Plans**

An Erosion & Sediment Control (ESC) plan is required for all residential construction within Boise’s designated Hillside Area. The plan must be included in the building permit plan set, reviewed and approved by the City prior to the start of any earth disturbing activity.

The ESC plan must be prepared or approved by an individual who has successfully completed a City-approved Plan Designer Construction Site Erosion and Sediment Control training program.

- In lieu of class attendance, individuals qualified in ESC, or who hold a valid certification from an authority recognized in Erosion and Sediment Control may apply for Certification by Experience. An application with an attached resume listing ESC work experience and certifications must be submitted for City review. A Boise City Plan Designer Certification number must be obtained prior to plan submittal to Boise City for Certification by proof of experience or reciprocity.

- The individual preparing or approving the plan must affix their signature and City-issued certification number to the ESC plan and report.

For more information about ESC plan requirements, and permit fees, go to www.cityofboise.org/pds or contact an Erosion Control Inspector at 384-3802 for assistance.

**Erosion & Sediment Control Permit**

Where exterior renovations, additions, or accessory buildings are constructed or where earth is disturbed on interior alterations, an Erosion & Sediment Control (ESC) permit shall be in place during construction and through final landscaping. Measures must be
implemented by, and be under the direct supervision of, an individual who successfully completed a City-approved Responsible Person construction site erosion and sediment control training program.

Flood Plain Areas
If your proposed construction is an addition (not including 2nd story) - OR - accessory structure located in the flood plain area, it must comply with the Boise City Flood Plain Ordinance. There will be additional requirements prior to and after building permit issuance depending on the construction proposed. To verify if you are within a flood plain area, contact the Mapping Division at 384-3996.

Fees
Building Division Fees
Building permit fees, Plan Review fees and Erosion & Sediment Control fees will be collected when permit is issued. Contact the Permit Counter at 384-3802 for specific fee information.

These fees may apply, depending on project scope:

Sewer Connection
If the new site is within the Boise Sewer District, a sewer connection fee may be collected at the time the building permit is issued. If located within another sewer district, then fees are paid directly to that district.

Impact Fees
Verify amount of the Boise City Park, Police and Fire Impact Fees by calling 384-3720. These fees must be paid at the time the building permit is obtained.

Road Impact Fees
The Ada County Highway District (ACHD) determines if fees are required. Provide written proof of payment (or written confirmation that no fees are due) to the PDS Permit Desk. Contact Ada County Highway District (318 E. 37th Street, Garden City) at 387-6100.

Plan Review Hours
- Plan Reviewers are available from 8:00 - 11:00 a.m. and 1:00 - 4:00 p.m. daily. Check in at the Permit Counter.
- Plan Reviewers see customers on a first come, first serve basis. Be prepared to wait in line.