



MULTNOMAH COUNTY
LAND USE AND TRANSPORTATION PROGRAM
1600 SE 190TH Avenue Portland, OR 97233
PH: 503-988-3043 FAX: 503-988-3389
<http://www.co.multnomah.or.us/landuse>

NOTICE OF DECISION

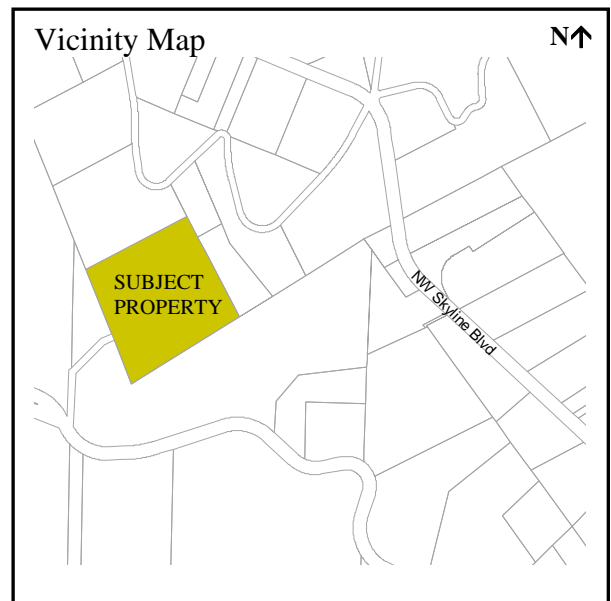
This notice concerns a Planning Director Decision on the land use case(s) cited and described below.

Case File: T2-06-095

Permit: Hillside Development Permit

Location: 9003 NW SKYLINE BLVD
TL 3200, SEC 09A, 1N-1W
SKYLINE AC; LOT 30
Tax Account #R773503100

Applicant/ John Sullivan & Janet Ebright
Owner: 9003 NW Skyline Blvd.
Portland, OR 97231



Summary: Hillside Development Permit to construct a 5,251 square foot replacement dwelling in a Rural Residential (RR) zone, with a Significant Environmental Concern overlay for wildlife habitat (SEC-h) and a Hillside Development overlay, in the West Hills Rural Plan Area. The proposal also includes the removal of an existing farm building and detached garage.

Decision: Approved, with conditions.

Unless appealed, this decision is effective Thursday, October 19, 2006, at 4:30 PM.

Issued by:

Kenneth Born, AICP, Planner

For: Karen Schilling- Planning Director

Date: October 5, 2006

Opportunity to Review the Record: A copy of the Planning Director Decision, and all evidence submitted associated with this application, is available for inspection, at no cost, at the Land Use Planning office during normal business hours. Copies of all documents may be purchased at the rate of 30-cents per page. The Planning Director's Decision contains the findings and conclusions upon which the decision is based, along with any conditions of approval. For further information on this case, contact Kenneth Born, AICP, Staff Planner at 503-988-3043 ext. 29397.

Opportunity to Appeal: This decision may be appealed within 14 days of the date it was rendered, pursuant to the provisions of MCC 37.0640. An appeal requires a \$250.00 fee and must state the specific legal grounds on which it is based. To obtain appeal forms or information on the procedure, contact the Land Use Planning offices at 1600 SE 190th Avenue (Phone: 503-988-3043). This decision cannot be appealed to the Land Use Board of Appeals until all local appeals are exhausted.

This decision is final at the close of the appeal period, unless appealed. The deadline for filing an appeal is Thursday, October 19, 2006 at 4:30 pm.

Applicable Approval Criteria: Multnomah County Code (MCC): MCC 38.5515-5520, Hillside Development and Erosion Control Permit (HDP).

Copies of the referenced Multnomah County Code sections can be obtained by contacting our office at 503-988-3043 or by visiting our website at <http://www.co.multnomah.or.us/landuse>

Scope of Approval

1. Approval of this land use permit is based on the submitted written narrative(s) and plan(s). No work shall occur under this permit other than that which is specified within these documents. It shall be the responsibility of the property owner(s) to comply with these documents and the limitations of approval described herein.
2. **This land use permit expires 2 years from the date the decision is final if; (a) development action has not been initiated; (b) building permits have not been issued; or (c) final survey, plat, or other documents have not been recorded, as required. The property owner may request to extend the timeframe within which this permit is valid, as provided under MCC 38.0690 or 37.0700, as applicable. A request for permit extension may be required to be granted prior to the expiration date of the permit.**

Conditions of Approval

The conditions listed are necessary to ensure that approval criteria for this land use permit are satisfied. Where a condition relates to a specific approval criterion, the code citation for that criterion follows in parenthesis.

1. **Stripping of vegetation, grading, or other soil disturbance shall be done in a manner which will minimize soil erosion, stabilize the soil as quickly as practicable, and will expose the smallest practical area at any one time during construction [MCC 33.5520(A)(2)(b)].**
2. **Mulching shall be used to protect exposed critical areas during development [MCC 33.5520(A)(2)(d)].**

3. Silt fencing shall be installed down slope of the disturbed soil area as shown on Exhibit 6 prior to soil disturbance and maintained until project is finalized and vegetation has been re-established [MCC 33.5520(A)(2)(g)].
4. Stockpiled topsoil shall be protected from erosion by applying a 6-mil plastic sheet cover. Disposed spoil areas shall be seeded as soon as permanent placement is completed. All disturbed areas are to be seeded or planted within thirty (30) days of the date grading activities are concluded. [MCC 33.5520(A)(2)(m)]
5. On-site disposal of construction debris is not authorized under this permit. No spoils stockpile sites have been indicated on the plans, therefore any spoils will need to be removed from the site. Any spoil materials removed from the site shall be disposed of in an area which meets the applicable code requirements of that location. Construction debris removed off-site shall be taken to a location approved for the disposal of such material by applicable Federal, State and local authorities. Fill materials necessary for landscaping shall be clean and non-toxic. This permit does not authorize dumping or disposal of hazardous or toxic materials, synthetics (i.e. tires), petroleum-based materials, or other solid wastes which may cause adverse leachates or other off-site water quality effects. [MCC 33.5520(A)(2)(n)]
6. The Property Owner shall maintain best erosion control practices through all phases of development. Erosion control measures are to include hay-bale sediment barriers on the downslope of all disturbed areas in accordance with the submitted application materials of this permit. Reseeding at a rate of 100 pounds per acre shall be accomplished as soon as ground disturbing activities have been completed. If hydromulch will be employed it shall be installed at a rate of 2,000 pounds per acre. All erosion control measures are to be implemented as prescribed in the current edition of the *Erosion Prevention Sediment Control Plans Technical Guidance Handbook*, copies of which are available for purchase at our office, or through the City of Portland. The property owner or representative shall verify that all erosion control measures are properly installed and in working order prior to initiating grading activities.
7. During wet weather months, straw mulch, erosion blankets, the construction of a granular haul road, geotextile filler fabric, or 6-mil plastic sheeting shall be used as a to provide erosion protection for exposed soils such as the stockpile areas. Site preparation activities shall be accomplished by using track mounted equipment in the wet weather months.
8. The County may supplement described erosion control techniques if turbidity or other down slope erosion impacts result from on-site grading work. The Portland Building Bureau (Special Inspections Section), the local Soil and Water Conservation District, or the U.S. Natural Resource Conservation Service can also advise or recommend measures to respond to unanticipated erosion effects. [MCC 33.5520(A)(2)(m)]
9. Observation of work required by an approved Geotechnical Report shall be conducted by a Certified Engineering Geologist or Geotechnical Engineer at the applicant's expense; the geologist's or engineer's name shall be submitted to the Director prior to zoning approval of the Building Permit [MCC 33.5515 (F)]. The Engineering Geologist or Geotechnical Engineer is required to submit a site report after development activities have ceased which describe his or her observations.

Note: Once this decision is final, application for building permits may be made with the City of Portland, Building Department. When ready for building permit signed off, the applicant shall call the Staff Planner, Ken Born, at (503) 988-3043 (ext. 29397), for an appointment for zoning review plan check and to sign the building permit form. Please note, Multnomah County must review and sign off on the building permit form and plans before the applicant submits building plans to the City of Portland. Three sets of the building plans and four site plans of the building area are needed for building permit zoning sign off. There is a \$53.00 fee required by the County for zoning sign off. A \$77.00 grading and erosion control inspection fee will also be collected at that time.

Notice to Mortgagee, Lien Holder, Vendor, or Seller:

ORS Chapter 215 requires that if you receive this notice it must be promptly forwarded to the purchaser.

Findings of Fact

FINDINGS: Written findings are contained herein. The Multnomah County Code criteria and Comprehensive Plan Policies are in **bold** font. The applicants statements are identified below as ‘**Applicant:**’. Staff comments and analysis are identified as ‘**Staff:**’ and address the applicable criteria. Staff comments may include a conclusionary statement in *italic*.

1. Project Description

Applicant: *We understand that the development will consist razing the existing residence, detached garage, and barn, and constructing a two-story, wood-framed residence with appurtenant pavements and utilities. We understand that the new residence will be constructed with post-and-beam floors, and the new attached garage will be constructed slab-on-grade. No detailed structural information has been provided; however, we have assumed that building loads will be typically of these structures, with continuous perimeter footing loads of less than 2 kips per lineal foot (klf), interior column loads of less than 25 kips, and uniform floor slab load less than 100 psf. Based on topography at the site and the site plan you provided, we understand the site grades on the northern portion of the building pad be lowered by up to approximately 3 feet, and that site grades at the southern end of the building pad will be raised by up to approximately 4 feet.*

Staff: The property is mapped in a Slope Hazard Overlay zone. The Slope Hazard Overlay zone designates areas where Hillside Development Permits are required pursuant to MCC 33.5505. The purpose of Hillside Development Permit review is to ensure the repair and/or replacement of improvements will be constructed on the site in a manner that is safe and minimizes the potential for earth movement, erosion, and related environmental damage.

The improvements were reviewed for compliance with the significant environmental concern standards for wildlife habitat, and approved in case file T2-06-020. The Significant Environmental Concern review was approved on July 12, 2006 with an effective date of July 26, 2006.

2. Site Characteristics

Applicant:

Regional Geology

The site is located on the western flank of the Portland Hills in the Willamette Valley. The Willamette Valley was formed when the volcanic rocks of the Oregon Coast Range, originally formed as submarine islands, were added on the North American Continent. The volcanic rocks slowly subsided forming a depression in which various types of marine sedimentary rocks accumulated. Approximately 15 million years ago, these marine sediments were, in turn, covered by the Columbia River Basalts that flowed down the Columbia River Gorge and as far south as Salem. Uplift and tilting of the Oregon Coast Range and the western Cascade Range formed the trough-like character of the Willamette Valley. Streams draining the adjacent Cascade Mountains began depositing sediments into the Willamette and Columbia River valleys, and a volcanic episode deposited the Boring Lavas in several localized vents including Walters Hill, Powell Butte, and Mt. Talbert. Uplift and tilting of within the Willamette Basin formed the intra-valley

highlands such as the Tualatin and Chehalem Mountains. Infilling of the Willamette Valley continued from weathering of the adjacent hills and deposition of alluvium by the Willamette River and its tributaries throughout the valley. Catastrophic glacial floods later flowed into the Willamette Valley approximately 12,000 to 15,000 years ago and deposited fine to coarse grained sedimentary assemblages (Pleistocene flood deposits) mapped throughout the area.

Site Geology

Geologic maps indicate that the project area is underlain by Portland Hills Silt, which is an eolian loess sequence. Borings in the Portland Hills indicate that the silt sequence is generally 20 to 30 feet thick. The deepest known deposit of Portland Hills Silt is a layer fifty-five feet thick found at the crest of the West Hills in Forest Park. The Portland Hills Silt caps hard volcanic rock (Boring Lava) in the area of the site.

Site Surface Conditions

The site consisted of one tax lot totaling approximately 6 acres. The site was occupied by a single-family residence (Figure 3, Photographs 1 and 3), detached garage, and barn (Figure 3, Photograph 3), all located within the north-central portion of the site near the top of a south-trending ridge. Typical slope gradients in the vicinity of the existing residence were on the order of approximately 7 horizontal to 1 vertical (7H:1V). The slopes immediately around the existing residence contained concrete block retaining walls up to approximately 5 feet high, and rockery walls up to 3 feet high (Figure 3, center of Photograph 3). Away and down slope of the existing residence, on-site slopes had gradients up to approximately 3H:1V. Vegetation around the existing residence typically consisted of grasses and small trees. The remainder of the site was densely vegetated with a mixture of conifer and deciduous trees (Figure 3, Photograph 2), and blackberry bushes.

Site Subsurface Conditions

Field exploration

Six test pits (TP-1 through TP-6) were excavated at the site on August 1, 2006, to practical equipment refusal depths of eight (8) feet bgs using a Takeuchi TB 125 mini excavator provided and operated by Steven Wright Tractor Service. The approximate test pit locations are shown on the attached Site Plan, Figure 2. The test pits were located in the field using approximate measurements from existing site features shown on the Site Plan. A member of the CGT's staff logged the soils observed within the test pits in general accordance with the United Soil Classification System (USCS), and collected representative samples of the materials encountered. CGT has provided an explanation of the USCS on the attached Soil Classification Criteria and Terminology, Figure 4. Our laboratory staff visually examined all samples returned to our laboratory in order to refine the field classifications.

Pocket penetrometer readings were taken in the upper four feet of the test pits in order to aid in characterizing the consistency of the soils encountered. The pocket penetrometer is a hand-held instrument that provides an approximation of the unconfined compressive strength of fine-grained soils. The correlation between pocket penetrometer readings and the consistency of fine-grained soils is provided on the attached Figure 4.

Logs of the test pits are presented on the attached Test Pit Logs, Figures 5 through 10. Elevations indicated on the test pit logs were interpolated from the topographic map provided, and should be

considered approximate. Results of the laboratory tests are shown on the attached logs.

Subsurface Materials

Undocumented silt fill (ML FILL) was encountered at the surface in test pits TP-3 and TP-4 and extended to depths of approximately 3 feet bgs. The silt fill was brown, moist, and contained trace pieces of brick, charcoal, and tree roots to 2 inches in diameter. The upper approximately 1 to 1 ½ feet of material encountered within test pits TP-1, TP-2, TP-5 and TP-6, and underlying the silt fill in test pits TP-2 and TP-4 to depths of about 4 feet bgs, was silt topsoil (OL). The silt topsoil was typically stiff to hard, dry to moist, brown, and contained tree roots and rootlets. Underlying the silt topsoil in the test pits was native silt (ML), which was typically hard, moist, gray/brown and extended to practical equipment refusal depths, 6 to 8 feet bgs.

The subsurface materials and the results of our laboratory tests are described in more detail on the attached Test Pit Logs, Figures 5 through 10.

Groundwater

Groundwater was not encountered during the explorations performed at the site on August 1, 2006. A review of water well logs published by the Oregon Department of Water Resources for wells located within about ¼-mile of the site indicated that regional groundwater has been encountered by others at depths in excess of 50 feet bgs. It should be noted that groundwater levels are relative to the ground surface and, due to local topography, the levels reported on the logs are considered generally indicative of local groundwater levels and may not reflect actual groundwater levels at the site. We anticipate that groundwater levels will fluctuate due to seasonal and annual variations in precipitation, changes in site utilization, or other factors. In addition, the on-site, native silt (ML) and silt fill (ML FILL) are conducive to low infiltration rates and the formation of perched groundwater tables.

Staff: The property is located in the West Hills Rural Plan Area and is 215 feet from NW Skyline Road. The property is zoned Rural Residential (RR). The property contains a slope hazard overlay zone, and a significant environmental concern overlay for habitat and streams (SEC-h and -s). A mapped stream crosses the property from the northeast to the southwest. The topography generally slopes downward from northeast to southwest, with steeper gradients occurring in the southern portion of the property. The site contains moderately dense woody vegetation throughout, with cleared areas surrounding the existing building site in close proximity. The property borders the City of Portland along its northeastern property line.

Staff concurs with the applicant's description of the site's geology and surface and subsurface conditions in the vicinity of the subject property.

3. Proof of Ownership and Initiation of Action

Staff: An application for a Hillside Development Permit (HDP) is classified as a Type II permit application. As such, an application may only be initiated upon written consent of the property owner or contract purchaser. Multnomah County Assessment and Taxation records shows John Sullivan as the owner of the subject lot (Exhibit B.1). Janet Ebright has signed the General Application Form (Exhibit A.1), and has been authorized as the applicant. *This criterion has been met.*

4. The Subject Property is in Full Compliance

Staff: There are no active violation cases or active complaints currently pending on the subject property. County staff completed a site visit on June 21, 2006 and found no violations of the zoning code.

5. Public Comment

MCC 37.0530(B) Type II Decisions

(B) Type II decisions involve the exercise of some interpretation and discretion in evaluating approval criteria. Applications evaluated through this process are assumed to be allowable in the underlying zone. County Review typically focuses on what form the use will take, where it will be located in relation to other uses and natural features and resources, and how it will look. However, an application shall not be approved unless it is consistent with the applicable siting standards and in compliance with approval requirements. Upon receipt of a complete application, notice of application and an invitation to comment is mailed to the applicant, recognized neighborhood associations and property owners within 750 feet of the subject Tract. The Planning Director accepts comments for 14 days after the notice of application is mailed and renders a decision. The Planning Director's decision is appealable to the Hearings Officer. If no appeal is filed the Planning Director's decision shall become final at the close of business on the 14th day after the date on the decision. If an appeal is received, the Hearings Officer decision is the County's final decision and is appealable to LUBA within 21 days of when the decision is signed.

Staff: An opportunity to comment letter was mailed to property owners within 750-feet of the property lines on September 7, 2006 (Exhibit C.2). The following is a summary of the comments received. *Procedures met.*

Multnomah County Transportation Program

In a memo June 26, 2006, County transportation staff indicated that they do not object to the proposal and will not require any conditions of approval (Exhibit D.1).

Robert Mossbrucker

In a September 21, 2006 telephone conversation, Mr. Mossbrucker conveyed concern that the project will impact habitat within the Class 1 Wildlife Habitat zone, and a stream which crosses the property. He also commented on the potential for stockpiled fill material to become saturated with water and develop into a debris flow or mud flow.

6.1 The proposal meets the requirements of the Hillside Development Standards of MCC 38.550 through MCC 38.5525.

MCC 38.5505 Permits Required

Hillside Development Permit: All persons proposing development, construction, or site clearing (including tree removal) on property located in hazard areas as identified on the "Slope Hazard Map", or on lands with average slopes of 25 percent or more shall obtain a Hillside Development Permit as prescribed by this subdistrict, unless specifically exempted by MCC 33.5510.

Staff: The property is identified on the Slope Hazard Map. The property is also not exempt under MCC 38.5510 because the volume of materials to be filled is greater than 50 cubic yards. The applicant estimates that 552 cubic yards of soil is to be disturbed, stored, disposed of or used as fill.

6.2 MCC 33.5515 Application Information Required

An application for development subject to the requirements of this sub-district shall include the following:

- (A) A map showing the property line locations, roads and driveways, existing structures, trees with 8-inch or greater caliper or an outline of wooded areas, watercourses and include the location of the proposed development(s) and trees proposed for removal.**
- (B) An estimate of depths and the extent and location of all proposed cuts and fills.**
- (C) The location of planned and existing sanitary drainfields and drywells.**
- (D) Narrative, map or plan information necessary to demonstrate compliance with MCC 38.5520(A). The application shall provide applicable supplemental reports, certifications, or plans relative to: engineering, soil characteristics, stormwater drainage, stream protection, erosion control, and/or replanting.**

Staff: The applicant has submitted maps meeting the requirements of MCC 33.5515(A). The maps are included as Exhibits A.4 and A.5. The estimate of depths, extent and location of proposed cuts and fills is supported by the HDP-1 form (Exhibit A.2), and Grading Plan (Exhibit A.5). The location of existing sanitary drainfields and drywells is shown on the Storm Water Plan (Exhibit A.4). A narrative written by the applicant addressing grading and erosion control standards is shown as Exhibit A.6. *This criterion has been met.*

6.3 (E) A Hillside Development permit may be approved by the Director only after the applicant provides:

- (1) Additional topographic information showing that 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 depth are planned. High groundwater conditions shall be assumed unless documentation is available, demonstrating otherwise; or**
- (2) A geological report prepared by a Certified Engineering Geologist or Geotechnical Engineer certifying that the site is suitable for the proposed development; or,**
- (3) An HDP Form-1 completed, signed and certified by a Certified Engineering Geologist or Geotechnical Engineer with his/her stamp and signature affixed indicating that the site is suitable for the proposed development.**
 - (a) If the HDP Form-1 indicates a need for further investigation, or if the Director requires further study based upon information contained in the HDP Form-1, a geotechnical report as specified by the Director**

shall be prepared and submitted.

Applicant: *A Hillside Development Permit application form, signed and certified by a geotechnical engineer indicating that the site is suitable for the proposed project.*

Staff: The applicant has submitted an HDP Form-1 which was stamped and signed by a Registered Professional Engineer (Exhibit A.2). The HDP Form-1 indicates that the site is suitable for the proposed development. This recommendation was based on a geotechnical report, included as Exhibit A.3. *This criterion has been met.*

6.4 (F) Geotechnical Report Requirements

(1) A geotechnical investigation in preparation of a Report required by MCC 33.5515 (E) (3) (a) shall be conducted at the applicant's expense by a Certified Engineering Geologist or Geotechnical Engineer. The Report shall include specific investigations required by the Director and recommendations for any further work or changes in proposed work which may be necessary to ensure reasonable safety from earth movement hazards.

(2) Any development related manipulation of the site prior to issuance of a permit shall be subject to corrections as recommended by the Geotechnical Report to ensure safety of the proposed development.

(3) Observation of work required by an approved Geotechnical Report shall be conducted by a Certified Engineering Geologist or Geotechnical Engineer at the applicant's expense; the geologist's or engineer's name shall be submitted to the Director prior to issuance of the Permit.

(4) The Director, at the applicant's expense, may require an evaluation of HDP Form- 1 or the Geotechnical Report by another Certified Engineering Geologist or Geotechnical Engineer

Staff: The applicant has submitted a geotechnical report, included as Exhibit A.3. The report was drafted by an engineering geologist with Carlson Geotechnical, and makes recommendations necessary to ensure reasonable safety from earth movement hazards. The report recommends that site stripping, rough grading, foundation, floor slab, and pavement subgrades, and placement of engineered fill be observed by the project geotechnical engineer or their representative. This will be required under a condition of approval. *As conditioned, this criterion has been met.*

6.5 (G) Development plans shall be subject to and consistent with the Design Standards For Grading and Erosion Control in MCC 33.5520 (A) through (D). Conditions of approval may be imposed to assure the design meets those standards.

Staff: See Findings 6.6 through 6.25 below.

6.6 MCC 33.5520 Grading and Erosion Control Standards

Approval of development plans on sites subject to a Hillside Development Permit shall be based on findings that the proposal adequately addresses the following standards.

Conditions of approval may be imposed to assure the design meets the standards:

(A) Design Standards For Grading and Erosion Control

(1) Grading Standards

- (a) Fill materials, compaction methods and density specifications shall be indicated. Fill areas intended to support structures shall be identified on the plan. The Director or delegate may require additional studies or information or work regarding fill materials and compaction;**

***Applicant:** Requirement met. Fill materials will consist of free draining granular fill such as 1-1/2"-0 crushed rock under structures, roads, walks, and patios; and excavated soil from the site for landscape areas. Compaction methods are standard compaction equipment such as a plate compactor. Density specifications are 95% under structures, roads, walks, patios, etc. Fill areas intended to support structures are indicated on the plan.*

Staff: Fill areas are shown on the grading plan presented as Exhibit A.5. Fill materials, compaction methods and density specifications are contained with the geotechnical report (Exhibit A.3). *This criterion has been met.*

6.7

- (b) Cut and fill slopes shall not be steeper than 3:1 unless a geological and/or engineering analysis certifies that steep slopes are safe and erosion control measures are specified;**

***Applicant:** Requirements met. For the slope that is at 2:1, Engineering analysis has certified that the slope is safe and erosion control measures are specified on the site plan.*

Staff: The geological analysis indicates that the project can be developed as proposed, consistent with erosion control recommendations provided within the geotechnical report. These recommendations are specific to site preparation, wet weather conditions, structural fill, shallow footings, floor slabs, pavement subgrades, drainage considerations, utility trenches, and seismic design.

The applicant's grading plan (Exhibit A.5) indicates that "where existing grade is at a slope steeper than 5 horizontal to 1 vertical (20 percent) and the depth of the fill exceeds 5 feet benching shall be provided in accordance with Figure J107.3. A key shall be provided which is at least 10 feet in width and 2 feet in depth." *This criterion has been met.*

6.8

- (c) Cuts and fills shall not endanger or disturb adjoining property;**

***Applicant:** Requirements met. Proposed cut and fills will not endanger or disturb adjoining property.*

Staff: The new residence is located approximately 47 feet to the north of the south property line and a minimum of 128 ft to the east property line. The Geotechnical Engineer Ryan Houser has reviewed proposed site stripping measures, importation of granular structural fill, utility trench excavation and the use of trench backfill. Based upon the engineering report submitted by the applicant (Exhibit A.3), the cuts and fills for the replacement dwelling will not endanger or disturb adjoining properties. *This criterion has been met*

- 6.9** (d) **The proposed drainage system shall have adequate capacity to bypass through the development the existing upstream flow from a storm of 10-year design frequency;**

Applicant: Requirements met. A licensed storm water engineer has engineered and certified that the drainage system is adequate handle a ten-year storm.

Staff: The applicant has submitted a Storm Water Certificate (Exhibit 15) signed and stamped by Don Cushing, PE stating that construction of an on-site storm water drainage control system is required. Mr. Cushing has certified that the rate of storm water runoff attributed to the development during the 10-year/24-hour storm will be greater than that which existed prior to development as measured from the property line or from the point of discharge into a watercourse. Exhibit A.4 illustrates the proposed drainage system in the form of a roof drain installed at the low spot of the structure's easterly roofline that will channel water into a drainpipe and to a new 12 foot landscaped catch basin. *This criterion has been met.*

- 6.10** (e) **Fills shall not encroach on natural watercourses or constructed channels unless measures are approved which will adequately handle the displaced streamflow for a storm of 10-year design frequency;**

Applicant: Requirements met. This project will not encroach on a natural watercourse or constructed channel.

Staff: Fill encroachment on natural watercourses or channels is not proposed. *This criterion has been met.*

- 6.11** (2) **Erosion Control Standards**
(a) **Stripping of vegetation, grading, 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;**

Applicant: Requirements met. Stripping and grading operations will be done only to the extent necessary to construct the project. Work to be done in dry weather. Soil will be stabilized with permanent landscaping or temporary measures to prevent erosion.

Staff: Surface vegetation, organic topsoil, and undocumented silt fill will be removed in an area five feet around the proposed building site, structural fill areas and pavement locations, at a depth of 1 to 4 feet. The applicant is proposing to install and maintain silt fencing, hay bales, buffer areas of natural growth, and granular haul roads to reduce sediment transport and to stabilize the soil quickly. While the applicant's narrative anticipates only working in dry weather, the geotechnical report acknowledges that construction during the wet season will take place. During wet weather, the geotechnical report (Exhibit A.3) recommends that site preparation activities be accomplished using track-mounted equipment. The applicant has demonstrated that the smallest practical area will be exposed at any one time during construction. *This criterion has been met.*

- 6.12** (b) **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;**

Applicant: *Requirements met. The replacement structure will closely overlap the existing structure, minimizing new areas to be disturbed. If permits are obtained in the adequate timeframes, grading work will occur between July and September (dry weather months) minimizing potential erosion hazards. The foundation of the home will be poured prior to the utility trenching down the driveway, allowing trench spoils to be used as backfill for the new foundation, minimizing interim soil storage.*

Staff: Based on the analysis of application materials (HDP Form 1, project plans, application narrative), cut and fill modifications to the topography and erosion potential will be minimized. The applicant has proposed an engineering solution to accommodate the volume and velocity of surface runoff generated by the development (refer to Finding 6.9). While the applicant's narrative anticipates only working in dry weather, the geotechnical report acknowledges that construction during the wet season will take place. *This criterion has been met.*

6.13 (c) Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development;

Applicant: *Requirements met. If we encounter wet weather, mulching will be used to protect exposed critical areas during development.*

Staff: A condition of approval will require the applicant to use temporary vegetation and/or mulching to protect exposed critical areas during site development. *As conditioned, this criterion has been met.*

6.14 (d) Whenever feasible, natural vegetation shall be retained, protected, and supplemented;

- 1. A 100-foot undisturbed buffer of natural vegetation shall 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 within 100-feet of a wetland;**
- 2. The buffer required in 1. may only be disturbed upon the approval of a mitigation plan which utilizes erosion and stormwater control features designed to perform as effectively as those prescribed in the currently adopted edition of the "Erosion Prevention & Sediment Control Plans Technical Guidance Handbook (1994)" and the "City of Portland Stormwater Quality Facilities, A Design Guidance Manual (1995)" and which is consistent with attaining equivalent surface water quality standards as those established for the Tualatin River Drainage Basin in OAR 340;**

Applicant: *Requirements met. This project will not encroach within 100 feet of a water body or wetland.*

Staff: The proposed improvements were reviewed for compliance with the significant environmental concern standards for wildlife habitat, and approved in case file T2-06-020. This application was conditioned (Condition of Approval #4) to require the applicant to "maintain the existing density of the forested areas on the property to the north, northwest and northeast of the development area on the property. This project does not require disturbance within 100 feet of a

top bank of a stream or waterbody. *This criterion has been met.*

6.15 (e) Permanent plantings and any required structural erosion control and drainage measures shall be installed as soon as practical;

Applicant: *Requirements met. Permanent landscape plantings will be planted as soon as practical.*

Staff: The applicant has proposed erosion control measures as shown and described in Exhibits A.3, A.4 and A.5. These measures (silt fencing, gravel construction entrance, detention basin) shall be installed prior to the commencement of construction and shall remain in place until construction has concluded. Permanent vegetation will be established consistent with Exhibit 8. *This criterion has been met.*

6.16 (f) 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;

Applicant: *Requirements met. This project will implement construction best practice erosion control measures as shown on the site plan. The final post-construction stormwater drainage has been engineered and stamped by a licensed professional Oregon engineer.*

Staff: Storm water drainage will be provided by a 12' detention basin. When construction is complete, much of the development site will drain into the basin. Accumulated sediment will be removed from the basin, and areas on the sides of the basin will be planted with vegetation. The pond has been designed by a professional engineer to keep peak flow rates from the ten year/24 hour storm event at their pre-development rates. The outlet of the detention basin will be stabilized by a riprap apron. The rate of surface water will be retarded by vegetative growth within the 12' detention pond, and sediment trap located at the low point of the pond (Exhibit A.4). *This criterion has been met.*

6.17 (g) Sediment in the runoff water shall be trapped by use of debris basins, silt traps, or other measures until the disturbed area is stabilized;

Applicant: *Requirements met. This project will implement construction best practice erosion control measures as shown on the site plan.*

Staff: Mobilized sediment will be captured by vegetative growth within the 12' detention pond, and the sediment trap installed at the bottom of the pond (Exhibit A.4). *This criterion has been met.*

6.18 (h) 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;

Applicant: *Requirements met. This project will implement construction best practice erosion control measures as shown on the site plan. Stripping and grading operations will be done only to the extent necessary to construct the property. Work to be done in dry weather. Soil will be*

stabilized with permanent landscaping or temporary measures to prevent erosion.

Staff: The applicant is proposing to install a permanent foundation drainage system to protect the exterior wall of the foundation by draining subsurface water before it gets to the foundation. The outlet will be installed above the sloping surface of fills located to the southwest of the building site (Exhibit A.4). Most surface water will be directed to a 12' detention basin. Rip rap will be installed to prevent damage to the steep slopes located to the south and west from the system's outflow. While the applicant's narrative anticipates only working in dry weather, the geotechnical report acknowledges that construction during the wet season will take place. *This criterion has been met.*

- 6.19** (i) **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;**

Applicant: *Requirements met. A licensed storm water engineer has engineered and certified that the drainage system is adequate handle a ten-year storm.*

Staff: Exhibit A.4 illustrates the proposed drainage system. Surface runoff will be carried through a 6" roof drain installed at the low spot of the structure's easterly roofline, which will channel water into a drainpipe and to a 12 foot landscaped detention pond. The diverted water will be directed underground approximately 60 feet to a rip rap out located to the south of the detention pond. A foundation drain system is also proposed *This criterion has been met.*

- 6.20** (j) **Where drainage swales are used to divert surface waters, they shall be vegetated or protected as required to minimize potential erosion**

Applicant: *Requirements met. A licensed storm water engineer has engineered and certified that the drainage system is adequate handle a ten-year storm. Permanent landscape plantings will be planted as soon as practical.*

Staff: A detention pond with a 1" diameter restrictor at its outlet is proposed to the east of the replacement dwelling. According the Exhibit A.3, the basin will be vegetated. The diverted water will be directed underground approximately 60 feet to a rip rap out fall to the south of the detention pond. *This criterion has been met.*

- 6.21** (k) **Erosion and sediment control devices shall be required where necessary to prevent polluting discharges from occurring. Control devices and measures which may be required include, but are not limited to:**
- 1. Energy absorbing devices to reduce runoff water velocity;**
 - 2. Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule;**
 - 3. Dispersal of water runoff from developed areas over large undisturbed areas.**

Applicant: Requirements met. This project will implement construction best practice erosion control measures as shown on the site plan. Grading work is anticipated to occur between July and September (dry weather months) minimizing potential erosion hazards.

Staff: The applicant is proposing to use a detention pond, sediment trap, and a stabilized gravel entrance to control sedimentation. A detention pond will be vegetated and use an outflow outlet to reduce the speed of entering water. A condition of approval will be included stating that the County may supplement described erosion control techniques if turbidity or other down slope erosion impacts result from on-site grading work. The Portland Building Bureau (Special Inspections Section), the local Soil and Water Conservation District, or the U.S. Soil Conservation Service can also advise or recommend measures to respond to unanticipated erosion effects. (MCC 38.5520(C)(2)). While the applicant's narrative anticipates only working in dry weather, the geotechnical report acknowledges that construction during the wet season will take place. *Criterion met, as conditioned.*

6.22 (I) **Disposed spoil material or stockpiled topsoil shall be prevented from eroding into streams or drainageways by applying mulch or other protective covering; or by location at a sufficient distance from streams or drainageways; or by other sediment reduction measures;**

Applicant: Requirements met. Disposed spoil materials or stockpiled topsoil shall be located sufficient distance from streams and drainage ways. They will be covered and/or surrounded by a silt fence if necessary. This project will not encroach within 100 feet of a water body or wetland.

Staff: The applicant will be required to remove spoils and other construction-related waste from the site to a location approved for the disposal of such materials, such as a landfill. The applicant will be required to maintain erosion control best management practices including check dams and sediment barriers to control erosion into streams or drainageways. *Criterion met, as conditioned.*

6.23 (m) 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.

Applicant: *Requirements met. Non-erosion pollution associated with construction shall be prevented from leaving the site.*

Staff: A condition of approval will require pollution prevention measures to be implemented, consistent with the standard specifications listed above. *Criterion met, as conditioned.*

6.25 (B) Responsibility

(1) Whenever sedimentation is caused by stripping vegetation, regrading or other development, it shall be the responsibility of the person, corporation or other entity causing such sedimentation to remove it from all adjoining surfaces and drainage systems prior to issuance of occupancy or final approvals for the project;

(2) It is the responsibility of any person, corporation or other entity doing any act on or across a communal stream watercourse or swale, or upon the floodplain or right-of-way thereof, to maintain as nearly as possible in its present state the stream, watercourse, swale, floodplain, or right-of-way during such activity, and to return it to its original or equal condition.

Applicant: *Requirements met. This project will implement construction best practice erosion control measures as shown on the site plan. This project will not encroach within 100 feet of a water body or wetland.*

Staff: The applicant has acknowledged his responsibility for any sedimentation caused by the proposed project. Measures to control erosion and sedimentation have been reviewed through this permit and found to be adequate as proposed. However, a condition of approval is attached allowing the County to supplement the erosion control techniques described in this permit if on-site conditions result in turbidity or other down-slope erosion impacts. *As conditioned, this criterion has been met.*

7. Conclusion

Based on the findings and other information provided above, the applicant has carried the burden necessary for the proposed Hillside Development Permit. The applicant's request is approved subject to the conditions of approval established in this report.

8. Exhibits

Exhibit #	# of Pages	Description of Exhibit	Date Received/ Submitted
A.1	1	General Application Form	08/30/06
A.2	4	HDP Form 1	08/30/06
A.3	2	Report of Geotechnical Investigation	08/30/06
A.4	1	Storm Water / Grading and Erosion Control Plan	08/30/06
A.5	1	Grading Plan	08/30/06
A.6	6	Narrative - Grading and erosion control standards	06/06/06
A.7	1	Storm Water Certificate	06/08/06
'B'		Staff Exhibits	Date
B.1	1	A&T Property Information	N/A
B.2	1	Zoning Map	N/A
B.3	3	Site Visit Photos	06/21/06
'C'		Administration & Procedures	Date
C.1	1	Complete Letter – Day 1	09/07/06
C.2	4	Opportunity to Comment	09/07/06
C.3	4	Administrative Decision	10/05/06