



MULTNOMAH COUNTY
LAND USE PLANNING DIVISION
1600 SE 190TH Avenue Portland, OR 97233
(503) 248-3043 FAX: (503) 248 -3389

DECISION OF THE PLANNING DIRECTOR

Hillside Development Permit

Case File No.: HDP 13-99

November 24, 1999

PROPOSAL: An application for a Hillside Development Permit (HDP) for the purposes of excavating approximately 700 cubic yards of earth material, according to the applicant narrative, and placing 340 cubic yards of crushed rock as fill on the subject parcels. The applicant proposes to build a keystone retaining wall that crosses the three subject parcels as described and shown herein. The subject parcel is identified on the Multnomah County Slope Hazard Map and is part of the Balch Creek Drainage Basin.

**APPLICANT/
PROP.OWNER:** Robert Katz & Deborah Stanley
830 NW Saint Helens Road
Portland, OR 97229

PROPERTY OWNERS: William K. Rupp & Beverly A. Arnoldy Neal & Jeanine Holmlund
7416 NW Penridge Road 7430 NW Penridge Road
Portland, OR 97229 Portland, OR 97229

LOCATION: 7416 and 7430 NW Penridge Rd. and 830 NW St. Helens Rd.
T1N, R1W, Section 36,
Lot 1 & 2 of Penridge Estates and Lot 1 & 2 of Barnes Estates.
R#65532-0200, R#65532-0100, and R#05500-0580.
See attached map.

ZONING: Single-Family Residential (R-20) and Balch Creek Drainage Basin.

**APPROVAL
CRITERIA:** The applicable approval criteria for this decision include the following:
Multnomah County Zoning Code (MCC): Single-Family Residential R-20
(MCC 11.15.2852 et seq.), Hillside Development and Erosion Control (MCC
11.15.6700 - .6735).

PLANNING DIRECTOR DECISION:

Approval with conditions of the Hillside Development Permit, HDP 13-99, for the request to excavate approximately 700 cubic yards of earth material (but not to exceed the geotechnical report estimate of 850 cubic yards) and fill approximately 340 cubic yards of crushed rock fill to accommodate the construction of a keystone retaining wall on the subject parcel.

CONDITIONS OF APPROVAL:

HDP 13-99
Decision Mailed: November 24, 1999

Staff Planner: Tricia R. Sears
Phone (503) 2483043

1. The applicant shall maintain **Best Management Practices for erosion control** through all phases of development; including covering the stockpile. At the time of building permit sign-off, the applicant shall provide photo documentation that the erosion control measures have been installed on the site. As an alternative, the applicant may call the Land Use Planning office at (503)-248-3043 for a site inspection of the erosion control measures. Exhibit #1 illustrates the location and type of erosion control measures to be installed.
2. Under Section .6720 (F)(3) the "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." At the request of the applicant, Staff may grant the option that the applicant submit a letter requesting the option to submit the name of the Certified Engineering Geologist or Geotechnical Engineer at a future date and time certain.
3. The property owner shall comply with the requirements of Multnomah County's Right-of-Way Division. Please contact Alan Young in Multnomah County's Right-of-Way Division at (503)-248-3582 for further information. Staff notes that the applicant has submitted an "Application and Permit to Occupy and Perform Operations Upon a County Road or Dedicated Street" to the Right-of-Way Division.
4. At the time of building permit sign-off, the applicant shall make an appointment with the Staff Planner, Tricia R. Sears, at Multnomah County by contacting her at (503)-248-3043, for building permit sign-off. The applicant shall bring five (5) sets of building plans to the County for sign-off prior to submittal of the building permits to the City of Portland.
5. This approval is based on the submitted material for **HDP 13-99**. The proposed keystone retaining wall shall be constructed on the site in accordance with the design, size, and location shown and described in the application materials submitted by the applicant. Additional submittals and actions may be required of the applicant as noted in these Conditions of Approval.
6. Work described by this permit is proposed to occur in the Spring of 2000. The applicant shall accomplish the work described prior to October 15, 2000. In accordance with Section .6730 (A)(1)(o), all land disturbing activities within the Balch Creek Drainage Basin shall be confined to the period between May first and October first of any given year. In addition, all permanent vegetation or winter cover crop shall be seeded or planted by October first the same year it was begun. All soil not covered by buildings or other impervious surfaces must be completely vegetated by December first the same year the development was begun.
7. No additional land use action and/ or permit requests shall be accepted, relating to the subject application, until such time as all required fees for the said application have been paid in full.

FINDINGS:

A. Applicant:

The applicant has submitted a narrative addressing the Hillside Development Permit criteria and several letters explaining the proposed project. See below.

(Narrative from Harve Pennington dated 7/29/99.) The purpose of the new retaining wall is to provide sufficient area for vehicle turnaround and parking at the Katz residence and to stabilize the slope above the new driveway area. (Note: the Katz residence is located at the end of a dead end road.) The concrete wall

will remain intact, with the keystone wall abutting it per sheet 3. The wood wall will be removed to make room for the driveway expansion. For the walls appearance and esthetic enhancement value to the area, see the attached keystone wall brochure.

This portion of wall is shown on the drawing to facilitate installation as needed to insure stability of the bank where the old wood wall is being removed in this area. The keystone wall in this area would be easily removable for any future road improvements.

B. Staff:

The applicant requests approval to excavate approximately 700 cubic yards of material and add approximately 340 cubic yards of crushed rock fill to the subject parcels to accommodate the construction of a keystone retaining wall. The proposed retaining wall is located primarily on the Katz & Stanley property, as is illustrated on the submitted site plans. The applicant states the existing wood wall on the site will be removed. The location of the wood wall is shown on the applicant site plan attached as Exhibit #1.

The average slope of the subject parcel is 10% according to the Geotechnical Reconnaissance and Stability Preliminary Study [HDP Form 1] submitted by the applicant. The subject parcel is identified on the Multnomah County Slope Hazard Map (page 17). In accordance with Section .6710 of the Code, "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 25% or more shall obtain a Hillside Development Permit as prescribed by this subdistrict, unless specifically exempted by MCC .6715." The applicant is thus required to submit this HDP application.

The applicant has submitted copies of the Structural Calculations by Miller Consulting Engineers, Inc. for the keystone retaining wall. Please note the traffic plan outlined in the letter dated 8/30/99 submitted by Harve Pennington and attached as Exhibit #6.

The application was deemed incomplete on July 12, 1999. Staff visited the site on August 2, 1999. At that time, Staff met with the property owner, Robert Katz, Harve Pennington of Residential Retaining Walls Northwest (RRWNW, Inc.), Bob Elliot of Keystone Wall, and several neighbors of the subject property. The application was deemed complete November 19, 1999, after the applicant submitted the final comments from Miller Consulting Engineers. See Staff comments below.

Exhibits

1. Applicant Site Plan illustrating the location and type of the erosion control measures.
2. Applicant Site Plan illustrating the elevation at the top and bottom of the proposed wall.
3. Applicant Site Plan illustrating the location of the wall.
4. Applicant Plan for the cross section of the proposed cut area (where the wall is located).
5. Applicant Plan for the keystone wall section.
6. Letter from Harve Pennington of RRWNW Inc. dated August 27, 1999 regarding the proposed traffic plan for the duration of the construction of the retaining wall.
7. Basic Keystone Product Installation information (from the Keystone brochure).

Applicable Multnomah County Code Provisions:

Single-Family Residential R-20

11.15.2854 Restrictions

(A) Lot Size

- (1) The minimum lot size shall be 20,000 square feet. The minimum average lot width shall be 80 feet. The minimum average lot depth shall be 120 feet.**

[Renumbered 1996, Ord. 848 § 11]

Staff: The subject parcels of HPD 13-99 have the following size and house year built dates according to the Assessment and Taxation records of Multnomah County. The subject parcel (Katz & Stanley property) does not meet the minimum lot size requirement. See also Section .2858 (A)(1) for the Lot of Record for R#05500-0580. The proposed construction of the keystone retaining wall will not alter the property lines or the existing structures on the properties party to the application. The existing minimum average lot width and minimum average lot depth of each lot will remain the same.

<u>Parcel</u>	<u>Lot Size</u>	<u>Year Built</u>
R#05500-0580	19,100 square feet	1963
R#65532-0100	28,726 square feet	1990
R#65532-0200	28,738 square feet	1987

* * *

(B) Yard Requirements

- (1) Front Yard.** There shall be a front yard having a minimum depth of 30 feet, unless a previous building line less than this has been established, in which case the minimum front yard for interior lots shall be the average of the setbacks of the main structures on abutting lots on either side if both lots are occupied; if one lot is occupied and the other vacant, the setback shall be the setback of the occupied lot, plus one- half of the remaining distance to the required 30 foot setback. If neither of the abutting side lots or tracts are occupied by a structure, the setback shall be 30 feet.

- (2) Side Yard.** Side yards shall be a minimum of 10 feet.

- (3) Rear Yard.** There shall be a rear yard with a minimum depth of 30 feet to any permanent structure.

Staff: Based on the site plan submitted by the applicant from a building permit dated May 31, 1991, the existing single-family dwelling meets the required front yard, rear yard, and side yard setbacks of the R-20 zone. The application meets the criterion.

(C) Accessory Buildings

Accessory buildings may be allowed if they fulfill the front, side, and rear yard requirements of the district.

Staff: The applicant proposes to build a retaining wall. The applicant does not propose to build an accessory structure at this time.

(D) Off-Street Parking

Two automobile spaces on the lot shall be provided for each dwelling unit.

Staff: The applicant site has the required number of parking spaces on the subject parcel. The application meets the criterion.

(E) Height Restrictions

Maximum height of any structure shall be 35 feet. *[Amended 1984, Ord. 428 § 2]*

Staff: The applicant's proposed retaining wall is a maximum of approximately 12 feet in height as shown by the applicant site plan attached in Exhibit #2; it should be noted the wall height will vary along the wall. The applicant's proposal is shorter than the maximum height restriction of the zone. The definition of building height is in Section .0010 (page 1-2). The application meets the criterion.

(F) Lot Coverage

The maximum area that may be covered by the dwelling unit and accessory buildings shall not exceed 30% of the total area of the lot.

Staff: The applicant's proposed retaining wall traverses three parcels including the applicant's parcel. The site plan attached as Exhibit #1 illustrates the location of the proposed retaining wall. The addition of the wall does not cause the existing lot coverage of each parcel to exceed the maximum lot coverage of 30% of the lot.

(G) All lots in this district shall abut a street, or shall have such other access held suitable by the Hearings Officer.

Staff: The applicant and the property owners involved in the case will continue to access the subject parcels from NW St. Helens Avenue (Katz & Stanley) and NW Penridge Road (Rupp & Arnoldy, Holmlund) respectively. The application meets the criterion.

11.15.2858 Definition of Lot

(A) For the purposes of this district, a lot is:

(1) A parcel of land:

- (a) For which a deed or other instrument creating the parcel was recorded with the Recording Section of the public office responsible for public records, or was in recordable form, prior to March 10, 1994;**
- (b) Which satisfied all applicable laws when the parcel was created;**
- (c) Which satisfies the minimum lot size requirements of MCC .2854; and**
- (d) Which was not, on March 10, 1994 or later, contiguous to a substandard parcel or substandard parcels under the same ownership, or**

Staff: Two of the subject properties received approval for a Land Division, LD 4-83, and subsequently an Exempt Minor Partition and Lot Line Adjustment, case file EMP/ LLA 11/2/87 from Multnomah County's Land Use Planning Division. The applicants met the applicable laws at the time the parcels were created. The parcels involved in EMP/ LLA 11/2/87 are Lot 1 (R#65532-0100) and Lot 2 (R#65532-0200) of Penridge Estates. The Penridge Estates parcels both have greater than 20,000 square feet and meet the minimum lot size of the R-20 zone. The

Barnes Heights parcel, at 19,100 square feet, is smaller than the minimum lot size of the R-20. The Barnes Heights parcel, R#05500-0580, has retained its current size and configuration since prior to the March 10, 1994 date noted above. By the standards above, the parcel is considered a Lot of Record. The application meets the above noted criteria. Note also the Staff responses to Section .2854.

Hillside Development Permit

MCC 11.15.6710(A) - Permits Required: 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 .6715.

Applicant: None.

Staff: The applicant has submitted this application, HDP 13-99, in order to satisfy the requirements of Section .6710 (A).

MCC 11.15. 6720 - Application Information Required: An application for development subject to the requirements of this subdistrict 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.

Applicant: (Narrative dated 6/16/99.) All trees and brush to be removed during wall construction are less than 4" caliper and will be removed from the site for proper disposal. (Narrative dated 7/27/99 from Harve Pennington.) Several small maple and alder samplings, some salal sword ferns, native grass, and 4 decoratively placed rhodies will be removed from the area being excavated for the new keystone wall. This area extends from the face of the existing wood wall (see sheet 2 of 3), to approximately 9' behind the face of the new keystone wall (see sheet 3 of 3). The area in front of the keystone wall will be covered with asphalt for driveway use. The area behind the keystone wall will be seeded in grass and allowed to reforest naturally.

Staff: The applicant site plans attached as Exhibits #1 and #2 illustrate the subject parcel, the proposed location of the keystone retaining wall, and the driveway access to NW Saint Helens Avenue and NW Penridge Road. The site maps do not illustrate the vegetation proposed for removal. However, the applicant has described the type of vegetation to be removed from the site. The exhibits also show the location and type of erosion control measures to be installed on the subject parcel. The application meets the criterion.

(B) An estimate of depths and the extent and location of all proposed cuts and fills.

Applicant: (Narrative dated 6/16/99.) The existing wood wall will be removed and an area approximately 70' long with an average width of 20' sloping from 12' to 0' will be excavated resulting in approximately 700 cubic yards of dirt to be removed from the site for proper disposal. The new keystone wall is to be constructed using crushed rock fill per engineering of approximately 340 cubic yards. Fill will be stored and used in 24 cubic yard increments due to a lack of storage and work space.

Staff: The applicant has provided a cross section drawing and that drawing is attached as Exhibit #4. Exhibit #3 illustrates the location of the cross section of the proposed wall. The applicant submitted a sheet entitled "Partial Topography Survey" to illustrate elevations of the site. According to the HDP Form 1, completed by a Registered Professional Engineer, James E. Pyne, "Cuts range in depth between 1 and 13 feet and average 8 feet. The soils consist of wind deposited silt (loess) with some clay. All cut soils will be taken off site." According to Pyne, "The proposed wall backfill will consist of 3/4"-0 crushed aggregate with maximum 8.5' strata-grid 500 spaced 2' or less vertically to tie the keystone blocks. We recommend compaction in accordance with Multnomah County standards and verified by testing not less than every 2 vertical feet of backfill." The application meets the criterion.

(C) The location of planned and existing sanitary drainfields and drywells.

Applicant: (Narrative dated June 16, 1999.) There are no new drainfields or drywells required on this project.

Staff: The site plan labeled sheet 2 of 3, "Residential Retaining Walls NW, Inc" illustrates the location of the existing storm drain on the subject property. The applicant has provided a geotechnical evaluation of the site as required under the Hillside Development Permit criteria. The application meets the criterion.

(D) Narrative, map or plan information necessary to demonstrate compliance with MCC .6730 (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.

Applicant: (Narrative dated 6/16/99). A new impervious surface of 840 square feet will be created for driveway use.

Staff: The applicant has provided adequate narrative and site plan information to demonstrate compliance with MCC .6730 (A). The applicant has provided a "Geotechnical Reconnaissance and Stability Preliminary Study: HDP Form 1" completed by James E. Pyne, a State of Oregon Registered Professional Engineer. The applicant has also submitted "Structural Calculations for 5 Keystone Retaining Walls;" an analysis of the proposed retaining wall (at five heights) from Miller Consulting Engineers, Inc. The application meets the criterion.

(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: None.

Staff: A geotechnical report, the "Hillside Development Permit Application: Geotechnical Reconnaissance and Stability Preliminary Study," has been submitted by the applicant. The HDP Form 1 has been completed by James E. Pyne, a State of Oregon Registered Professional Engineer. The cuts will exceed 6 feet in depth according to the geotechnical report. The average slope of the property is 10% according to the geotechnical report. According to Pyne, "There are no signs of instability or other potentially adverse features on the proposed wall site or in surrounding area for a distance of more than 100 feet." In addition, Pyne states, "Adjacent properties are not likely to be impacted. The upper 2 to 3 feet of loose soil may have to be trimmed back on a 1H:1V slope. Based on our experience in the area, the remaining cut face should be stable on a vertical face for a period of 4 to 6 weeks." The application meets the criterion.

(F) Geotechnical Report Requirements

- (1) A geotechnical investigation in preparation of a Report required by MCC .6725(A)(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.**

Staff: Note the statement made by James E. Pyne in the geotechnical report and included in Section .6720 (B) above, regarding the testing "not less than every 2 vertical feet of backfill" of compaction areas. The applicant has submitted a geotechnical report as required and thus meets the criterion.

- (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.**

Staff: The applicant has submitted a geotechnical report as required and hence meets the criterion.

- (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.**

Staff: The applicant has submitted the required geotechnical information. Staff requires the proposed work be carried out in accordance with the submitted geotechnical information. A Multnomah County engineer reviewed the applicant's submitted geotechnical report and engineering calculations. Condition of Approval #2 requires the applicant to comply with this criterion. The application will meet this criterion.

- (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 the HDP Form 1 as required. No additional geotechnical information, except as established in Section .6720 (F)(3) above and in Condition of Approval #2, is required to be submitted by the applicant.

- (G) Development plans shall be subject to and consistent with the Design Standards For Grading and Erosion Control in MCC .6730(A) through (D). Conditions of approval may be imposed to assure the design meets those standards.**

Staff: The applicant has provided narrative responses and site plan information to address the standards of MCC .6730(A) through (D).

MCC 11.15.6730 - Grading and Erosion Control 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: Unit fill is clean 1" minus crushed rock per the attached engineering. Reinforced backfill and base leveling pad is clean 5/8" minus crushed rock per the attached engineering. All compaction is to be accomplished using hand-operated plat compaction equipment. Base leveling pad: Aggregate material shall be compacted to provide a dense, level surface compacted to 95% of Standard Proctor Density as determined in accordance with ASTM D698 for crushed rock. Reinforced backfill: Aggregate material should be placed in 8" lifts and compacted in such a way that it keeps the geogrid taut. Compaction shall be to 95% of Standard Proctor Density as determined in accordance with ASTM D698 for crushed rock.

Staff: The applicant is proposing to excavate approximately 700 cubic yards of material and to add approximately 340 cubic yards of crushed rock fill to the site. The applicant's submitted HDP Form 1, prepared by James Pyne of Carlson Testing, Inc., states that the total volume of earth material disturbed, stored, disposed of or used as fill is 850 cubic yards. The site is identified on the Slope Hazard Map (page 17) of Multnomah County and thus the applicant is required to obtain a Hillside Development Permit prior to the placement of any fill materials on-site and prior to removal of any on-site vegetation. An attached site map, Exhibit #1, shows the property line locations, the proposed location of the retaining wall, the erosion control measures, the existing wood and concrete walls, and the wooded areas adjacent to the site. The application meets the criterion.

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

Applicant: Slope to be cut to dimensions of attached engineering and construction drawings.

Staff: The applicant has submitted a site plan that shows the location of the proposed erosion control measures to be installed on site, see Exhibit #1. The applicant has submitted the required HDP Form 1 completed by a State of Oregon Registered Professional Engineer and a set of engineering calculations for the retaining wall. The applicant has requested to do the site work in the Spring of 2000. Under Section .6730(A)(2)(o), the land disturbing activities are limited to the period between May first and October first of any given year on sites within the Balch Creek Drainage Basin (as this site is). As described by the applicant, the proposed development meets the criterion.

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

Applicant: All cut and fill work will be accomplished from the wall area on Saint Helens Road to minimize impact on adjoining properties.

Staff: The applicant site plan attached as Exhibit #2 illustrates the elevation of the site and the height of the proposed retaining wall. The applicant submitted a cross section of the site in Exhibit #4. Exhibit #1 shows the location and type of the erosion control measures to be established on the site. The full size copy of Exhibit #2 describes the type of erosion control measures to be installed on-site. A Registered Professional Engineer has evaluated the cut and fills proposed by the applicant. The applicant has submitted the HDP Form 1 as required.

(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: The new wall drain pipe will be hooked to the existing storm drainage system in place of the present wall system to be removed with the old wall during construction. (Narrative submitted 7/29/99 from Harve Pennington.) The existing wood wall drainage system is a 4" perforated pipe hooked to the storm drain system at the juncture of the wood wall and the concrete wall. This pipe will be removed and hooked to the storm drain at the juncture of the keystone wall and the existing concrete wall, thereby adding no new or added amount of water to the system.

Staff: The site plan attached as Exhibit #1 indicates the location and type of the erosion control measures. A Multnomah County engineer reviewed the retaining wall calculations submitted by the applicant's engineer. The County engineer determined the new wall pipe hooked into the existing storm drainage system, as proposed by the applicant's engineer, will meet the 10-year design frequency standard. The application meets the criterion.

(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: There are no natural watercourses or constructed channels in the wall construction or adjoining areas.

Staff: The subject parcel is part of the Balch Creek Drainage Basin. The applicant states the site does not contain natural watercourses or constructed channels. The applicant met criterion (d) above for the 10-year design frequency standard. The location and type of erosion control measures to be installed on the subject parcel are illustrated in Exhibit #1. The application meets the criterion.

(2) Erosion Control Standards:

(a) On sites within the Tualatin River Drainage Basin, erosion and stormwater control plans shall satisfy the requirements of OAR 340. Erosion and stormwater control plans shall be designed to perform as prescribed by the "*Erosion Control Plans Technical Guidance handbook*" and the "*Surface Water Quality Facilities Technical Guidance Handbook*". Land disturbing activities within the Tualatin Basin shall provide a 100-foot undisturbed buffer from the top of bank of stream, or the ordinary high water mark (line of vegetation) of a water body, or with 100-feet of a wetland; unless a mitigation plan consistent with OAR 340 is approved for alterations within the buffer area.

Applicant: This construction site is not within the Tualatin River drainage basin.

Staff: The subject parcel is not located in the Tualatin Basin but it is located in the Balch Creek Basin according to the Multnomah County Sectional Zoning Map, page 128. The application is not subject to this criterion since the site is not within the Tualatin Basin. The site is *adjacent* to the Tualatin Basin.

- (b) 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 practicable area at any one time during construction.**

Applicant: Removal of vegetation, excavation and wall construction will be accomplished in a sequence resulting in a total construction time of less than 3 weeks. It is planned for the dry summer months of 1999 to minimize the possibility of erosion.

Staff: The applicant has modified the timeline from the proposal and requests the ability to do the work in the Spring of 2000. The erosion control plan consists of placing a sediment fence along the construction boundary, covering storm drains with filter fabric, and possibly putting straw on the site. The site plan attached as Exhibit #1 illustrates the location and type of erosion control measures to be installed. The full size copy of Exhibit #2 describes the type of erosion control measures to be installed on the site. A keystone retaining wall is proposed to on the three-parcel site. Staff has reviewed orthophotos of the site. The site plan illustrates some of the existing vegetation of the site. The applicant's submitted HDP Form 1 states that the cuts will range from 1 to 13 feet in depth and average 8 feet. Staff requires the applicant to call for inspection that the erosion control measures have been installed or submit photographs illustrating the location and type of erosion control measures installed on the site (see Condition of Approval #1). The application meets the criteria of minimizing soil erosion and stabilizing the soil quickly as described in (b).

- (c): 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: Slope to be cut to dimensions of attached engineering and construction drawings.

Staff: The cut and fill operations proposed for the site are necessary to accommodate the proposed keystone retaining wall, according to the geotechnical report submitted by James Pyne, a State of Oregon Registered Professional Engineer. In addition, the applicant has submitted geotechnical calculations from Miller Consulting Engineers, Inc. The existing retaining wall is to be replaced with this proposed Keystone wall. Again, refer to Exhibit #1 for the illustration of the existing concrete and wood walls. On the site plan attached as Exhibit #1, the application shows the erosion control measures to be installed on the site. The application meets the criterion.

- (d): Temporary vegetation/and or mulching may be required if protection is required on exposed critical areas during development.**

Applicant: Removal of vegetation, excavation and wall construction will be accomplished in a sequence resulting in a total construction time of approximately 3 weeks. It is planned for the dry summer months of 1999 to minimize the possibility of erosion.

Staff: The applicant has modified the timeline request for the proposal to be Spring of 2000. The applicant does not propose to mulch the site. The applicant proposes revegetate the site. The applicant site plan illustrates the location of the erosion control measures to be installed. Staff requires the applicant, in Condition of Approval #1 to submit photographic evidence to show the erosion control measures have been installed prior to building permit sign-off. With the proposed erosion control measures described through the applicant responses to the criteria of Section .6730, the application meets the criterion.

- (e): Whenever feasible, natural vegetation shall be retained, protected, and supplemented.**

- (i) **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;**
- (ii) **The buffer requirement in (i.) 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 “*Erosion Control Plans Technical Guidance Handbook*” and the “*Surface Water Quality Facilities Technical Guidance Handbook*” and which is consistent with attaining equivalent surface water quality standards as those established for Tualatin River Drainage Basin in OAR 340;**

Applicant: All work will be accomplished from the wall face area on Saint Helens Road there by minimizing damage to the area vegetation. There are no wetlands or streams within 200 yards or more of the construction site.

Staff: As described by the applicant under Section .6730, vegetation removal is minimal and replanting will occur. The applicant has proposed erosion control measures as illustrated on the site plan attached as Exhibit #1. The erosion control measures are described on the full size plan labeled, "Residential Retaining Walls NW, Inc.". The application meets the criterion.

- (f): Permanent plantings and any required structural erosion control and drainage measures shall be installed as soon as practical.**

Applicant: Wall drainage system to be installed during wall construction.

Staff: The applicant proposes to install permanent plantings. The applicant proposes erosion control measures as illustrated on Exhibit #1. The applicant and Staff responses in Section .6730 (A)(2)(b) describe erosion control measures proposed for the site. The application meets the criterion.

- (g): Provisions shall be made to effectively accommodate increased runoff caused by altered soil and surface conditions during and after development.**

Applicant: Wall construction will not create any significant increased runoff during or after construction.

Staff: The applicant and Staff responses in Section .6730 (A)(2)(d) and (e) describe that the applicant will establish erosion control measures on the subject parcel in an effort to minimize the surface water run-off. The applicant submitted retaining wall calculations from Miller Consulting Engineers, Inc. and a Multnomah County engineer has reviewed those calculations. The County engineer has determined the site will still meet the 10-year design frequency standards required in the provisions of Section .6730. The application meets the criterion.

- (h): 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: Silt traps to be installed per construction drawing sheet 2 during wet weather construction periods.

Staff: The applicant shows storm drains on the site plan on Exhibit #1 and as previously described. The applicant proposes to install erosion control measures before construction begins. The application meets the criterion.

- (i): Provisions shall be made to prevent surface water from damaging the sloping surfaces 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: Wall cut to be covered with plastic sheeting during wet weather.

Staff: The applicant is proposing an erosion control measure such as straw, filter fabric, and sediment bags. Exhibit #1 illustrates the location and type of the erosion control measures to be installed. The full size plan from Exhibit #2 describes the erosion control measures. The application meets the criterion.

- (j): All drainage provisions shall be designed to adequately carry existing and potential surface runoff to suitable drainageways such as storm drains or natural watercourses.**

Applicant: New wall drain to replace existing wall drain to replace existing wall drain and hook to the existing system which is adequate. (Narrative from Harve Pennington dated 7/29/99.) The existing wood wall drainage systems is a 4" perforated pipe hooked to the storm drain system at the juncture of the wood wall and the concrete wall. This pipe will be removed with the wood wall and replaced with a new one behind the new keystone wall and hooked to the storm drain at the juncture of the keystone wall and the existing concrete wall, thereby adding no new or added amount of water to the system.

Staff: The applicant proposes to install a system designed to accommodate the storm water run-off of the site. See also Section .6730 (A)(1)(d) and (e). The applicant submitted calculations for the retaining wall and those calculations were reviewed by a Multnomah County engineer. The drainage system in the wall will be altered as described by Harve Pennington in the letter dated 7/29/99. An excerpt of this letter is included in the Applicant statement for this criterion. The application meets the criterion.

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

Applicant: No drainage swales are to be used in this project.

Staff: The applicant proposes to alter the existing drainage as described above. The application meets the criterion.

- (l): Erosion and sediment control devices shall be required where necessary to prevent polluting discharge from occurring. Control devices and measures which may be required include, but are not limited to:**

- (i) Energy absorbing devices to reduce runoff velocity;**
- (ii) Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule;**
- (iii) Dispersal of water runoff from developed areas over large undisturbed areas.**

Applicant: Erosion and sediment control is not anticipated to be significant during dry weather construction. However erosion control will be installed per drawing sheet 2 as required by weather conditions.

Staff: The applicant proposes to install sediment bags on the subject parcel to accommodate runoff. Storm drains exist on the site. The application meets the criterion.

- (m): 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: Stockpiled material to be stockpiled on the asphalt driveway surface per drawing sheet 2.

Staff: The applicant proposes to stockpile material on the site. The applicant shall cover the stockpiled material with a tarp or other device to prevent the material from becoming run-off material. The application meets the criterion.

- (n): Such non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewater's shall be prevented from leaving the construction site through proper handling, disposal, continuous site monitoring and clean-up activities.**

Applicant: All construction debris such as pallets, broken blocks, plastic, etc. will be cleaned up and hauled off on a daily basis.

Staff: The applicant states non-erosion pollution will be minimal and that the appropriate disposal and clean-up activities will occur on the subject parcel. The application will meet the criterion.

- (o): On sites within the Balch Creek Drainage Basin, erosion and stormwater control features shall be designed to perform as effectively as those prescribed in the *Erosion Control Plans Technical Guidance Handbook* (January, 1991). All land disturbing activities within the basin shall be confined 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.**

Applicant: The site is not within the Balch Creek Basin or within 200 yards of any watercourse, creek, or wetland.

Staff: The site is located in the Balch Creek Basin according to the Multnomah County Sectional Zoning Map, page 128. Condition of Approval #1 requires the applicant to maintain Best Management Practices. The applicant shall comply with the criteria and thus comply with the condition that land disturbing activity occur only between May first and October first of any given year. For this application, the work shall occur in Spring 2000 as the applicant has verbally requested a modification of the written request approval for work during the "dry summer months of 1999." Condition of Approval #5 requires the applicant to comply with the plans, narrative, and other submitted application materials.

(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 original or equal condition.

(C) Implementation

- (1) Performance Bond** - A performance bond may be required to assure the full cost of any required erosion and sediment control measures. The bond may be used to provide for the installation of the measures if it is not completed by the contractor. The bond shall be released upon determination that the control measures have or can be expected to perform satisfactorily. The bond may be waived if the Director determines the scale and duration of the project and the potential problems arising therefrom will be minor.
- (2) Inspection and Enforcement.** The requirements of this subdistrict shall be enforced by the Planning Director. If inspection by County Staff reveals erosive conditions which exceed those prescribed by the Hillside Development Permit, work may be stopped until appropriate conditions are completed.
- (D) Final Approvals:** A certificate of Occupancy or other final approval shall be granted for development subject to the provisions of this subdistrict only upon satisfactory completion of all applicable requirements.

Comprehensive Plan Policies

Policy No. 13, Air, Water and Noise Quality:

Multnomah County, ... Supports efforts to improve air and water quality and to reduce noise levels. ... Furthermore, it is the County's policy to require, prior to approval of a legislative or quasi-judicial action, a statement from the appropriate agency that all standards can be met with respect to Air Quality, Water Quality, and Noise Levels.

Staff: No significant impact on air pollution, water quality and noise quality will result from the construction of the retaining wall so long as the submitted plans are followed and the applicant complies with the Conditions of Approval of this decision. Compliance with Conditions of Approval and compliance with applicable agencies standards (eg. Sanitarian, Building Codes) is required. The applicant has provided documentation that the applicable standards have been met and will be met as the development is constructed.

Policy No. 14, Developmental Limitations

The County's policy is to direct development and land form alterations away from areas with development limitations except upon a showing that design and construction techniques can mitigate any public harm or associated public cost and mitigate any adverse effects to surrounding persons or properties. Development limitations areas are those which have any of the following characteristics:

A. Slopes exceeding 20%;

Staff: The subject parcel is mapped on page 17 of the Slope Hazard Map of Multnomah County. According to the Soil Survey of Multnomah County, Oregon, the soil type on the subject parcel

(R#05500-0580) is Cascade silt loam, 15 to 30 percent slopes (7D). The properties owned by Rupp and Stanley (R#65532-0200) and the Holmlunds (R#65532-0600) include Cascade silt loam (7D) and Cascade-Urban land complex, 15 to 30 percent slopes (8D). According to the applicant's engineer, James Pyne, (see the HDP Form-1), the maximum slope of the property is 100%. The average slope of the property, as identified by Pyne, is 10%. Staff visited the site on August 2, 1999.

B. Severe erosion potential;

Staff: The subject parcel's soil type, 7D, has a high hazard of erosion according to the Soil Survey of Multnomah County, Oregon. Soil type 8D also has a high hazard of erosion. The applicant will install erosion control measures.

C. Land within the 100 year floodplain;

Staff: The subject parcel is not within the 100-year floodplain or floodway on the Federal Emergency Management Agency (FEMA) maps on file at Multnomah County.

D. A high seasonal water table within 0-24 inches of the surface for 3 or more weeks of the year;

Staff: According to the Soil Survey, the water table is a depth of 18 to 30 inches from December through April for soil type 7D. The seasonal high water table for Cascade-Urban land complex 15 to 30 percent slopes (8D), is at a depth of 20 to 30 inches from December through April according to the Soil Survey. A water table is perched upon the fragipan.

E. A fragipan less than 30 inches from the surface;

Staff: For soil type 7D, the silt loam fragipan is a depth of 60 inches or more according to the Soil Survey. According to the Soil Survey of Multnomah County, Oregon, the fragipan is located at a depth of 60 inches in soil type 8D.

F. Land subject to slumping, earth slides or movement.

Staff: According to the Soil Survey of Multnomah County, Oregon, the Cascade silt loam, 15 to 30 percent slopes, and the Cascade-Urban land complex, 15 to 30 percent slopes, are subject to slumping in areas of cut and fill.

Policy No. 37, Utilities:

The County's policy is to require a finding prior to approval of a legislative hearing or quasi-judicial action that:

WATER DISPOSAL SYSTEM:

- A. The proposed use can be connected to a public sewer and water system, both of which have adequate capacity; or
- B. The proposed use can be connected to a public water system, and the Oregon Department of Environmental Quality (DEQ) will approve a subsurface sewage disposal system on the site; or

- C. **There is an adequate private water system, and the Oregon Department of Environmental Quality (DEQ) will approve a subsurface sewage disposal system; or**
- D. **There is an adequate private water system, and a public sewer with adequate capacity.**

Staff: The applicant has existing water service for the existing single-family residence. Staff did not require the applicant to submit a Certification of Water Service form since the proposed development, a retaining wall, does not alter the existing water system.

DRAINAGE:

- E. **There is adequate capacity in the storm water system to handle the increased run-off; or**
- F. **The water run-off can be handled on the site or adequate provisions can be made; and**
- G. **The run-off from the site will not adversely affect the water quality in adjacent streams, ponds, lakes or alter the drainage on adjacent lands.**

Staff: Staff did not require the applicant to provide a completed copy of the Certification of On-Site Sewage Disposal form. The applicant submitted calculations from Miller Consulting Engineers, Inc. for the proposed retaining wall. Within this narrative, the applicant has described the alteration of "the existing wood wall drainage system" which will be replaced by "a new one behind the new keystone wall and hooked to the storm drain at the juncture of the keystone wall and the existing concrete wall." The County engineer reviewed the calculations submitted by the applicant, and based on his review, Staff made findings of compliance under Section .6730 (A)(1)(d) and (e) that the 10-year design standards were met.

ENERGY AND COMMUNICATIONS:

- H. **There is an adequate energy supply to handle levels projected by the plan; and**
- I. **Communications facilities are available.**

Staff: The required services are available to the site.

e. Policy No. 38, Facilities

The County's policy is to require a finding prior to approval of a legislative or quasi-judicial action that:

Fire Protection

- B. There is adequate water pressure and flow for fire fighting purposes; and**

C. The appropriate fire district has had an opportunity to review and comment on the proposal.

Staff: Staff did not require the applicant to provide a completed Fire District Review form for the proposed new retaining wall.

Police Protection

D. The proposal can receive adequate local police protection in accordance with the standards of the jurisdiction providing police protection.

Staff: Staff did not require the applicant to submit a completed copy of the Police Services Review form. However, the existing single-family home should retain the level of service required from the Multnomah County Sheriff Department's office and should not be altered by the proposed new (replacement) retaining wall.

CONCLUSIONS:

1. Multnomah County Code defines *Development* as "Any act requiring a permit stipulated by Multnomah County Ordinances as a prerequisite to the use or improvement of any land, including a building, land use, occupancy, sewer connection or other similar permit, and any associated grading or vegetative modifications.
2. The applicant has carried the burden necessary for granting a Hillside Development Permit, **HDP 13-99**, for the purposes of the proposed cut and fill to accommodate the construction of a retaining wall on the subject parcel as described herein. Conditions of Approval are included within this document.

NOTICE:

This decision was mailed November 24, 1999 in the manner required by ORS 197.763. Opportunity to appeal this decision and have the application considered at a public hearing will be provided until the close of business on December 6, 1999 at 4:30 PM. In the event of an appeal to this administrative decision, additional notice will be provided for the public hearing.

In the matter of HDP 13-99:

By: Tricia R. Sears, Land Use Planner
For: Kathy Busse, Planning Director

NOTICE:

The Administrative Decision detailed above will become final unless an appeal is filed within the 12-day appeal period, which starts the day after the notice is mailed. If the 12th day falls on a Saturday, Sunday, or a legal holiday, the appeal period extends through the next full business-day. If an appeal is filed, a public hearing will be scheduled before a County Hearings Officer pursuant to Multnomah County Code section 11.15.8290 and in compliance with ORS 197.763. To file, complete an Appeal of Administrative Decision for, and submit to the Multnomah County Land Use Planning Office, together with a \$100.00 fee and supplemental written materials (as needed) stating the specific grounds, approval criteria, or standards on which the appeal is based. To review the application file(s), obtain appeal forms, or other instructions, call the Multnomah County Land Use Planning Division at (503) 248-3043, or visit our offices at 1600 SE 190th Avenue, Portland, Oregon, 97223 [hours: 8:00 a.m.-4:30 p.m.; M-F].

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.