

1002 PROTECTION OF NATURAL FEATURES

1002.01 HILLSIDES

- A. Development on slopes greater than or equal to 20 percent and less than or equal to 35 percent—except that for residential development in the RR, MRR, and HR Districts, the upper limit is 25 percent—shall require review of a Type I application pursuant to Section 1307, *Procedures*, and shall be subject to the following standards:
1. No partition or subdivision shall create any new lot or parcel which cannot be developed under the provisions of Subsection 1002.01.
 2. Grading, stripping of vegetation, and lot coverage by structures and impervious surfaces shall be limited to no more than 30 percent of slopes 20 percent or greater. Variances to this standard may be granted pursuant to Section 1205, *Variances*. A variance shall not be granted unless the proposed development satisfies the following conditions:
 - a. The proposed lot coverage shall not exceed the maximum lot coverage standard of the zoning district;
 - b. The additional lot coverage, grading, or stripping shall not:
 - i. Decrease the stability of the slope;
 - ii. Appreciably increase erosion, sedimentation, or drainage flow from the property; or
 - iii. Adversely impact high-priority open space as defined in Section 1011, *Open Space and Parks*.
 - c. Measures shall be employed to minimize grading or filling to accomplish the development.
 - d. Disturbed areas shall be compacted if necessary and re-vegetated as soon as practical and before the annual wet season.
 3. Buildings shall be clustered to reduce alteration of terrain and provide for preservation of natural features.
 4. Creation of building sites through mass pad grading and successive padding or terracing of building sites shall be avoided.
 5. Roads shall be of minimum width, with grades consistent with County specifications. One-way streets may be allowed.

6. Re-vegetation of all graded areas shall be the responsibility of the developer and shall occur as soon as feasible following the final grading. Maintenance of the slopes shall be the responsibility of the developer until the property ownership is transferred.
- B. Development on slopes greater than 35 percent—and residential development on slopes greater than 25 percent in the RR, MRR, and HR Districts—shall require review of a Type II application pursuant to Section 1307 and shall be subject to the following standards:
1. Compliance with Subsections 1002.01(A)(1) through 6) shall be required.
 2. An engineering geologic study approved by the County shall establish that the site is stable for the proposed development, and any conditions and recommendations based on the study shall be incorporated into the plans and construction of the development. The study shall include the items listed in Subsection 1003.02(B)(2).
 3. Access to the site shall be approved by the County and the affected fire district, pursuant to the engineering geologic study and associated conditions. Review shall be required, if construction of such access requires cut and fill, blasting, tree cutting, retaining walls, or other terrain alterations which detract from the natural scenic quality of the site.
 4. The design of structures and re-vegetation plans shall ensure preservation or rapid reestablishment of the scenic quality of the site.
 5. A plan for surface water management and erosion control shall be approved pursuant to Subsection 1006.06.
 6. When a building is proposed, at least one of the following conditions shall apply:
 - a. It is not feasible to either transfer the density (in the case of residential development) or to develop on a portion of the subject property that is less sloped; or
 - b. Unique characteristics of the subject property, such as, but not limited to, vistas or solar exposure, could be better utilized by the proposed siting of structures with less or equal overall disturbance of the subject property than would occur otherwise under the provisions of this Ordinance.
- C. Approval of a permit under Subsection 1002.01(A) or (B) is valid for four years from the date of the final written decision. If the County's final written decision is appealed, the approval period shall commence on the date of the final appellate decision. During this four-year period, the approval shall be implemented, or the approval will become void.

1. “Implemented” means all major development permits shall be obtained and maintained for the approved development, or if no major development permits are required to complete the development contemplated by the approved permit, “implemented” means all other necessary County development permits (e.g. grading permit, building permit for an accessory structure) shall be obtained and maintained. A “major development permit” is:
 - a. A building or manufactured dwelling placement permit for a new primary structure that was part of the approved development; or
 - b. A permit issued by the County Engineering Division for parking lot or road improvements required by the approved development.
- D. If the approval of a permit under Subsection 1002.01(B) is not implemented within the initial approval period established by Subsection 1002.01(C), a two-year time extension may be approved pursuant to Section 1310, *Time Extension*.

1002.02 DEVELOPMENT RESTRICTION FOLLOWING EXCESSIVE TREE REMOVAL

Subsection 1002.02 applies to land inside the Portland Metropolitan Urban Growth Boundary, except land specially assessed as forestland on September 28, 2010.

- A. Definitions: Unless specifically defined in Subsection 1002.02(A), words or phrases used in Subsection 1002.02 shall be interpreted to have the same meaning as they have in common usage and to give Subsection 1002.02 its most reasonable application.
 1. Christmas Tree: A tree of a marketable species and evidencing periodic maintenance practices of shearing for Douglas fir, fir, and pine species, weed and brush control, and one or more of the following practices: basal pruning, fertilizing, insect and disease control, and soil cultivation.
 2. Diameter Breast Height (d.b.h.): A tree’s diameter measured by diameter tape at four and one-half feet above grade on the uphill side. On multi-stem trees, the stem with the largest diameter shall be measured.
 3. Hazardous Tree: A tree that, by reason of disease, infestation, age, or other condition, presents a known or immediate hazard to people or property.
 4. Nuisance Tree: Any tree of the following species: tree of heaven (*Alianthus altissima*), single seed hawthorn (*Crataegus monogyna*), English holly (*Ilex aquifolium*), plums (*Prunus* hybrids, which are not commercial nursery species), sweet cherry (*Prunus avium*), English laurel (*Prunus laurocerasus*), Portuguese laurel (*Prunus lusitanica*), black locust (*Robinia pseudoacacia*), European mountain ash (*Sorbus aucuparia*), and any listed in the Oregon Department of Agriculture’s Noxious Weed Policy and Classification System.

5. Orchard Tree: A tree maintained for the production of fruit or nuts for human consumption.
 6. Tree: Any woody plant with at least one well-defined stem.
 7. Tree Removal: The act of removing a tree by digging up or cutting down, or the effective removal through damage to a tree or its root system. Effective removal shall include any procedure the natural result of which is to cause the death or substantial destruction of a tree, including, but not limited to: topping and severe cutting back of limbs to such a degree as to destroy or adversely affect the normal growth pattern of the tree, girdling, and placing fill in excess of six inches deep over the root zone. Tree removal does not include routine pruning or trimming.
- B. Excessive Tree Removal: Excessive tree removal is the removal of more than three trees—excluding those identified as exempt in Subsection 1002.02(E)—on a lot of record in a calendar year.
- C. Development Restriction: If excessive tree removal occurred in the five years immediately preceding the date that a complete application is filed for design review or a conditional use or for a subdivision or partition that is not a middle housing land division, the application will be denied.
- D. Exception to Development Restriction: Notwithstanding Subsection 1002.02(C), a modification of a previous design review, subdivision, partition, or conditional use approval may be approved pursuant to Section 1309, *Modification*.
- E. Exempt Trees: Removal of the following exempt trees is not excessive tree removal, regardless of the number of such trees removed. However, removal of the listed trees may be regulated under other provisions of this Ordinance, such as Section 705, *Willamette River Greenway*, Section 706, *Habitat Conservation Area District*, and Section 709, *Water Quality Resource Area District*, or by conditions of approval on a previous land use decision.
1. Trees with a d.b.h. of less than six inches;
 2. Trees required to be removed by local, state or federal law or regulation, or by a fire official;
 3. Trees removed by a public utility—or required by a public utility to be removed—in order to maintain, repair, or replace an existing utility line;
 4. Trees removed by a public utility—or required by a public utility to be removed—in order to construct a new utility line, unless the purpose of the new line is to serve future development of the subject property;
 5. Orchard trees;

6. Christmas trees;
7. Trees planted on the site of a commercial nursery and grown for commercial purposes;
8. Nuisance trees;
9. Dead trees, where death resulted from an accident or non-human cause;
10. Diseased or hazardous trees, where the condition resulted from an accident or non-human cause;
11. Trees, the removal of which is authorized by approval of an administrative action under this Ordinance; and
12. Trees removed prior to September 28, 2010.

1002.03 TREES AND WOODED AREAS

- A. Existing wooded areas, significant clumps or groves of trees and vegetation, consisting of conifers, oaks and large deciduous trees, shall be incorporated in the development plan wherever feasible. The preservation of these natural features shall be balanced with the needs of the development, but shall not preclude development of the subject property, or require a reduction in the number of lots or dwelling units that would otherwise be permitted. Site planning and design techniques which address incorporation of trees and wooded areas in the development plan include, but are not limited to, the following:
 1. Siting of roadways and utility easements to avoid substantial disturbance of significant clumps or groves of trees;
 2. Preservation of existing trees within rights-of-way and easements when such trees are suitably located, healthy, and when approved grading allows;
 3. Use of flexible road standards as provided in Subsection 1007.02(B)(3), including one-way roads or split-level roads, to preserve significant trees and avoid unnecessary disturbance of terrain;
 4. Retention of specimen trees or clumps of trees in parking area islands or future landscape areas of the site as provided for in Section 1009, *Landscaping*.
 5. Use of wooded areas of the site for recreation, or other low-intensity uses, or structures, not requiring extensive clearing of large trees, grading, or filling activity which substantially alters the stability or character of the wooded area;

6. Retention of trees which are necessary to ensure the stability of clumps or groves of trees considering the type of trees, soil and terrain conditions, exposure to prevailing winds, and other site-specific considerations;
 7. Use of trees and wooded areas to buffer, screen, or provide transitions between different or conflicting uses on and off the site;
 8. Use of flexible-lot-size and planned unit development designs to minimize disturbance of wooded areas;
 9. Siting of uses and structures to utilize the natural microclimates created by wooded areas and trees to reduce extremes in temperature, provide wind protection, filter pollutants, and replenish oxygen and moisture to the air; and
 10. Use of other development techniques described in Subsection 1011.02(C).
- B. Trees and wooded areas to be retained shall be protected during site preparation and construction according to County design and specifications by:
1. Avoiding disturbance of the roots by grading and filling activity;
 2. Providing for water and air filtration to the roots of trees which will be covered with impermeable surfaces;
 3. Pruning or topping of trees which will be in parking areas or near buildings, as necessary, to maintain proper balance between top growth and roots, reduce windfall potential, and provide adequate vision clearances for safe vehicular circulation; and
 4. Requiring, if necessary, the advisory expertise of a qualified consulting arborist or horticulturist both during and after site preparation, and a special maintenance/management program to provide protection of specified wooded areas or specimen trees, as recommended by the arborist or horticulturist.

1002.04 RIVER AND STREAM CORRIDORS

The following standards shall apply to land that is outside both the Metropolitan Service District Boundary and the Portland Metropolitan Urban Growth Boundary.

- A. Developments shall be planned, designed, constructed, and maintained so that:
1. River and stream corridors are preserved to the maximum extent feasible and water quality is protected through adequate drainage and erosion control practices; and
 2. Buffers or filter strips of natural vegetation are retained along all river and stream banks.

- B. Except in the case of a river or stream subject to Section 704, *River and Stream Conservation Area*, or 705, *Willamette River Greenway*, the minimum structure setback from a river or perennial streambed shall be equal to the distance necessary to maintain or improve upon existing water quality. This distance shall be determined by a site investigation, but will not exceed 150 feet. Investigation shall consider:
1. Soil types;
 2. Types and amount of vegetative cover;
 3. Bank stability;
 4. Slope of the land abutting the river or stream;
 5. Hazards of flooding;
 6. River or stream character; and
 7. Any special Comprehensive Plan designation or management program.
- C. For water impoundments, diversions, and hydropower facilities, reasonable mitigation of adverse impacts to fisheries, wildlife, water quality, and flow shall be required commensurate with the intensity of the proposed use and resulting generating capacity.

1002.05 DEER AND ELK WINTER RANGE

Development in deer and elk winter range below 3,000 feet in elevation, as identified on Comprehensive Plan Map III-2, *Scenic and Distinctive Resource Areas*, shall be designed to minimize adverse wildlife impacts.

1002.06 MOUNT HOOD RESOURCE PROTECTION OPEN SPACE

Development in areas shown as Resource Protection Open Space on Comprehensive Plan Maps X-MH-1 through X-MH-3, *Resource Protection Open Space*, proposed in or within 100 feet of natural wetlands shall be designed to:

- A. Preserve functions of groundwater recharge, water storage, turbidity reduction, nutrient filtration, biologic or botanical production, and protective habitat cover;
- B. Provide compatibility with the continued performance of wetland functions, such as:
 1. Conservation of soil, vegetation, water, fish, and wildlife;
 2. Low-intensity, dispersed outdoor recreation, such as hiking and nature study; and

3. Utility easements, but only on peripheral areas and where alternative alignments are impractical;
- C. Eliminate the need for filling, dumping, and/or excavating in the wetland proper, unless approved pursuant to Subsection 1011.03; and
- D. Maintain the runoff coefficient and erosion equilibrium for lands bordering the wetland substantially the same as if such lands were undeveloped. Pier construction, elevated pedestrian boardwalks, semi-impervious surfacing, bridging of natural drainageways, and retention of vegetation in areas not intended for buildings or roads are recommended design methods.

1002.07 SIGNIFICANT NATURAL AREAS

Five significant natural areas are identified as unique/natural features on Comprehensive Plan Map III-2, *Scenic & Distinctive Resource Areas*. These areas are more specifically referred to as Williams Lake Bog, the land at Marmot, Multorpor Bog, Delphridge, and Wilhoit Springs. In these significant natural areas, the following shall be restricted, to the extent necessary to protect the unique or fragile character or features that are the basis for the unique/natural feature designation: building and road construction, filling and excavation, paving, and tree removal. Restrictions may be modified pursuant to Subsection 1011.03.

1002.08 SIGNIFICANT LANDFORMS AND VEGETATION

Institutional, commercial, and industrial development; multifamily dwellings; and developments of more than one duplex, triplex, or quadplex shall cluster and modulate building masses to minimize disturbance of existing significant landforms and vegetation. Pursuant to the review procedure required by Section 1102, *Design Review*, minimum front setbacks may be reduced or waived to minimize disturbance of natural landforms or vegetation. If a setback reduction is granted, a program for protection of those landforms and vegetation during construction, and for long-term maintenance, shall be provided.

1002.09 RESOURCE PROTECTION AREAS IN THE VR 4/5 and VR 5/7 DISTRICTS

Development of primary dwellings and accessory structures within a Resource Protection Area shown on Comprehensive Plan Map X-SV-1, *Sunnyside Village Plan, Land Use Plan Map*, shall require review of a Type I application pursuant to Section 1307, *Procedures*, and shall be subject to the following standards:

1. The maximum disturbed area shall be 5,000 square feet. All buildings and yard areas shall be contained within this area. Driveways, utility construction, and required trails shall be excluded from calculation of the disturbed area.
2. Driveways shall be designed at the narrowest width allowed by the *Clackamas County Roadway Standards* or the applicable fire district, whichever is wider.

CLACKAMAS COUNTY ZONING AND DEVELOPMENT ORDINANCE

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-230, 9/26/11; Amended by Ord. ZDO-245, 7/1/13; Amended by Ord. ZDO-248, 10/13/14; Amended by Ord. ZDO-266, 5/23/18; Amended by Ord. ZDO-282, 7/1/22]