

REVISION DATE: AUGUST 22, 2007

Proposed amendments to the VENETA LAND DEVELOPMENT ORDINANCE No. 461 Section 5.25, & VENETA LAND DIVISION ORDINANCE 462 Section 1.06

****NOTE:** The existing code is identical in both the Land Development and Land Division Ordinance. Both will be replaced with identical new sections.

SECTION 5.25(1.06) ADDITIONAL REVIEW PROCESS AND STANDARDS FOR LAND DEVELOPMENTS AND LAND DIVISIONS ON LAND WITH SLOPES OF OR OVER FIFTEEN PERCENT

EXISTING CODE BEING REPLACED

~~In addition to other review processes and standards required in other sections of this ordinance, the following process and standards shall apply to all land developments and land divisions on land where the slope meets or exceeds fifteen percent:~~

- ~~(1) A site shall be deemed to meet the 15% slope criteria if the average slope across the site in any direction meets or exceeds a 15 foot rise in every 100 feet. Isolated areas on the site may exceed the 15% limit and not require the additional review process itemized below providing the entire site is below the 15% threshold.~~
- ~~(2) All land developments and land divisions shall be subject to review by the City Building and Planning Official and the City Engineer. The applicant shall submit a geo-technical report prepared and stamped by a professional engineer with specialty background in geotechnical engineering or a professional geologist with specialty certification in engineering geology who is registered through the State Board of Examiners for Engineering or the State Board of Geologist Examiners. The report shall contain and analyze on site and adjacent off site data on buildable and non-buildable areas and a statement of the expected impacts resulting from the proposed development. The required report shall demonstrate that the proposed developments are within the carrying capacity of the land based on the following on-site and adjacent off site features and characteristics of the proposed development:
 - ~~(a) Base Geology~~
 - ~~(b) Slopes (steepness, orientation and aspect)~~
 - ~~(c) Soils~~
 - ~~(d) Stream and Drainage Patterns~~
 - ~~(e) Housing Density Impact~~~~
- ~~(3) All proposed developments, except those within the Rural Residential (RR) zone, shall be served by city water and wastewater service (sanitary sewer).~~

- ~~(4) The requirements of this section shall apply and be considered during any site review process required by the Land Development or Land Divisions Ordinances. As part of the site review process, vegetation and animal patterns, including endangered and threatened plant and animal species known to be in the area, shall be considered.~~
- ~~(5) The minimum lot size is 8,000 square feet. Larger lot sizes may be required to address technical concerns raised in the geo-technical report.~~

PROPOSED REPLACEMENT CODE

- (1) Purpose. It is the purpose of this section to ensure that development on hillside areas occurs in such a manner as to protect
1. the public health, safety, and general welfare
 2. the natural and topographic character and identity of these areas;
 3. environmental resources;
 4. the aesthetic qualities and restorative value of lands;
- by insuring that development minimize soil erosion, sedimentation of lower slopes, slide damage, flooding problems, and severe cutting or scarring. It is the intent of these development standards to encourage a sensitive form of development and to allow for a reasonable use that complements the natural and visual character of hillside areas within the city.
- (2) Definitions. As used in this chapter, except where the context otherwise clearly requires:
- a) “Certified Engineering Geologist” is any Geologist who is certified in the specialty of Engineering Geology under provisions of ORS 672.505 to 672.705 and registered in the State of Oregon.
 - b) “Civil Engineer” is a Professional Engineer, registered with the State of Oregon, who by training, education and experience is qualified in the practice of geotechnical or soils engineering practices.
 - c) “Cut” is an excavation into a hillside
 - d) “Emergency action” is an action that must be undertaken immediately to prevent an imminent threat to public health or safety, or prevent imminent danger to public or private property.
 - e) “Erosion” is the wearing away of the earth’s surface as a result of the movement of wind, water, or ice.
 - f) “Excavation” is any act by which earth, sand, gravel, rock or any similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated or bulldozed, including the conditions resulting there from.
 - g) “Fill” or “backfill” is a deposit of earth or other natural or manmade material placed by artificial means. This includes approved waste materials and the re-deposit of previously removed material.

- h) “Geotechnical Engineer” is a Professional Engineer, registered with the State of Oregon as provided by ORS 672.002 to 672.325, who by training, education and experience is qualified in the practice of geotechnical or soils engineering practices.
 - i) “Geotechnical Report” is a report prepared and stamped by a Certified Engineering Geologist or Geotechnical Engineer, evaluating the site conditions and mitigation measures necessary to reduce the risk associated with development in geologically hazardous areas.
 - j) “Grading” is the act of excavating or filling, which results in the changing of the elevation or drainage pattern of the surface of the land.
 - k) “Ground Disturbance” includes grading, filling, cutting, removal of vegetation or trees and other activities which disturbs the native soil to a degree that soils are exposed to erosion.
 - l) “Hillside Area” is any property with an average predevelopment slope of 15% or more across the site in any direction. For lands to be divided, the average slope shall be determined for the entire parent parcel.
 - m) “Landslide” is the downslope movement of soil, rocks, or other surface matter on a site. Landslides may include, but are not limited to, slumps, mudflows, earthflows, debris flows, and rockfalls.
 - n) “Mitigation Measure” is an action designed to reduce project-induced geologically hazardous area impacts.
 - o) “Slope” is an inclined earth surface, the inclination of which is expressed denoting a given rise in elevation over a given run in distance. A fifteen percent slope, for example, refers to a fifteen foot rise in elevation over a distance of one hundred feet. Slopes are measured across a horizontal rise and run calculation within any horizontal twenty-five foot distance.
 - p) “Steep slope” means a slope of 15% or greater
 - q) “Vegetation Removal” means the disturbance or removal of more than 2,500 square feet of existing vegetative ground cover including but not limited to trees, brush, grass and low growing ground cover plants.
- (3) Applicability. Except as provided under section 5.25(4), the provisions of this section shall apply to the following activities in hillside areas.
- a) Tentative or final platting of partitions, subdivisions, manufactured home parks, planned unit developments, or mixed use master plans;
 - b) Proposed planned unit developments, or mixed use master plans;
 - c) Construction of new commercial building;
 - d) Construction of new residential building, including accessory structures over 200 sqft in area.
 - e) Construction of roads and/or utilities;
 - f) Excavation/fill/grading of more than 50 cubic yards;
 - g) Expansion of footprint of more than 500 square feet of any existing structure, building, road or utility;
 - h) Vegetation removal that exceeds 2,500 square feet;

- i) This chapter may be applied to any project or activity, including those which would otherwise qualify for an exemption, for which the City Engineer has filed a statement showing that specific site characteristics or proposed activities may pose a significant risk which may not be sufficiently addressed using the other provisions of this ordinance.
 - j) The requirements of this chapter are in addition to other provisions of the Veneta Land Development Ordinance, Land Division Ordinance, and the Veneta Municipal Code. Where the provisions of this chapter conflict with other provisions of this ordinance or other applicable regulations, the more restrictive regulation shall apply.
- (4) Exemptions The following activities, and persons engaging in same, are EXEMPT from the provisions of this chapter:
- a) Improvement of single family lots of less than 16,000 sqft approved prior to (*insert adoption date here*) subject to conformance with all conditions of approval for the subdivision and all recommendations of the approved geotechnical report for the subdivision.
 - b) Construction/modifications of utilities and streets within existing footprint of existing improved streets;
 - c) Interior remodels;
 - d) Construction/replacement of fences as allowed elsewhere in this code.
 - e) Exterior alterations and/or additions under 500 square feet in area;
 - f) Construction of accessory structures under 200 square feet in area;
 - g) Construction/renovation of retaining walls less than 4' in height (measured from bottom of footing to top of wall);
 - h) Excavation or fill of less than 50 cubic yards;
- (5) Information Requirements
- a) Geotechnical Reports
 - i) Geotechnical Report shall be performed by a Certified Engineering Geologist, Geotechnical Engineer, or a combination thereof. The geotechnical professional shall carry a minimum of one million dollars in errors and omissions insurance on a "claims made" basis.
 - ii) The geotechnical report shall be in accordance with the Guidelines for Preparing Engineering Geologic Reports in Oregon as adopted by the Oregon State Board of Geologist Examiners or in accordance with the recommendations of the Geo-technical institute of the American Society of Civil Engineers;
 - iii) The geotechnical report shall be prepared and stamped by the author(s);
 - iv) A geotechnical report is required to be submitted concurrent with all land use applications which include hillside areas as defined by this section or concurrent with submission for building permits for applicable activities as defined in section 3 above. Construction on individual lots shall comply with all recommendations of the approved geotechnical report for the subdivision.
 - v) The geotechnical report shall include at minimum the following:

1. Description of the field investigation and findings;
2. Conclusions regarding the affect of geological conditions on the proposed development;
3. The assessment shall make recommendations regarding specific areas which require further investigation prior to construction.
4. The assessment shall detail the surface and subsurface conditions of the site and delineate the areas of a property that might be subject to geological hazards;
5. The author(s) of the assessment shall state whether or not, in their professional opinion, a significant risk of landslide/geologic hazard exist due to seismic or water induced forces, or if significant landslide/geologic hazard risk from any cause may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the assessment.
6. Comprehensive description of the site topography and geology; including the characterization of each type of native and imported soil likely to be impacted by the planned activities including an analysis of Atterburg Limits, Specific Gravity, Natural Moisture Content, Cohesion, Internal Angle of Friction and other relevant factors.
7. An estimate of the safety factor against slope instability before and after development considering gravity forces, seismic forces, hydraulic impacts under varied ground water or vadose zone conditions, and vegetation removal;
8. Sections through the hillside illustrating pre and post development configurations for structures, piping and roads;
9. Estimate of the allowable bearing strength of the soil for foundations and identification of areas requiring further detailed work;
10. Assessment of the safety of, and recommendations for, cut and fill operations, including specific requirements for plan modification, corrective grading and special techniques and systems to facilitate a safe and stable development;
11. Assessment of and recommendations for mitigation of potential adverse impacts on structures, roads, and piping systems including special construction practices necessary to facilitate a safe and stable development;
12. Recommendations for transport and collection of surface and subsurface (if present) water; including locations of springs, seeps, and wetlands as a source of underfloor water and the need for foundation drains or other specific recommendations for seepage and drainage control. If springs or seeps are discovered during construction. The geotechnical professional shall be available to make field recommendations at the applicant's expense.
13. Recommendations regarding vegetation removal and replacement;
14. Recommendations concerning the location, design, and construction of stormwater detention facilities given specific site conditions;

15. Recommendations for maximum height and slope of cut and fill slopes on an area-by-area basis based on soils and other geotechnical information for specific areas across the site.
16. Other recommendations as necessary, commensurate with the project grading and development;

(6) Review Procedures and Approvals

- a) The standards of this chapter shall be applied to all land use applications concurrent with the land use review process and shall be subject to review and conditioning by the Planning Commission or Building and Planning Official as required. Review and issuance of building permits in hillside areas shall be based on conformance with the provisions of this chapter as approved by the Building and Planning Official. The Building and Planning Official may refer any building permit for construction on hillside areas to the Planning Commission for approval.
- b) No regulated activity may be initiated until the City has reviewed the geotechnical report and issued a land use decision and all appeal timelines have passed. Regulated activities independent of land use decisions shall not be initiated until written approval to proceed is issued by the City Engineer.
- c) Review of submittals shall include examination to ensure that the following criteria are met:
 - i) Required elements are completed;
 - ii) Geotechnical report procedures and assumptions are generally accepted; and
 - iii) All conclusions and recommendations are supported and reasonable.
- d) Conclusions and recommendations stated in an approved report shall then be directly incorporated or provide the basis for conditions of approval for the regulated activity. Other conditions may be applied to ensure compliance with the development standards of this section.
- e) All geotechnical reports shall be reviewed by an engineer with expertise in geotechnical engineering, geological engineering, or a civil engineer with demonstrated experience in hillside development as determined by the City. The cost of review shall be paid by the applicant.

(7) Certification Of Compliance.

No regulated activity requiring a geotechnical report shall receive final inspection until the City receives a written statement by a Geotechnical Engineer or Engineering Geologist that all performance, mitigation, or monitoring measures contained in an approved geotechnical report are completed, in place, and operable. For lots requiring special construction practices, a certificate of compliance is required from the engineer of record prior to issuance of certificate of occupancy.

(8) Disclosure and Indemnification. As a condition of approval of regulated activities located in hillside areas, the owner:

- a) Shall record a declaratory statement against the property stating the property contains slopes of fifteen percent or more and that all approved geotechnical reports for such property are on file with the City and;
 - b) Shall sign and record an agreement to indemnify and hold harmless the City of Veneta and employees thereof in the event that any aspect of the development were to fail, and
 - c) Shall provide evidence of such recordings to the City
- (9) Emergency Actions. The person undertaking an emergency action as defined by this chapter shall notify the Planning Official or City Engineer upon or immediately following the commencement of the emergency activity. If the Planning Official after review by the City Engineer determines that the action or part of the action taken is beyond the scope of an allowed emergency action, enforcement action may be taken.

(10) Design Standards

a) Grading

1. The maximum area of ground disturbance allowed per lot in steep slope areas shall be based on the average slope of the lot as follows:

Average Slope	Max area of disturbance per lot	<i>Min lot size to allow 4000sqft of disturbance, FYI only</i>
15%-19.9%	40%	10,000
20%-24.9%	30%	13,333
25%-30%	20%	20,000
30-35%	10%	40,000
>35%	0%	Unbuildable

2. For lots in steep slope areas, minimum interior side and back yard building setbacks shall be ten (10) feet.
3. All newly created lots or lots reconfigured through property line adjustment shall contain a building envelope of at least 4000 sqft with an average predevelopment slope of 35% or less.
4. Cut and fill slopes steeper than 4:1 and greater than four (4) feet in height shall be supported with retaining walls. All necessary slope retention devices shall be subject to approval as part of the public improvement plans and installed prior to Final Plat if located on property to be dedicated as public, or prior to Certificate of Occupancy if located elsewhere.
5. Fences within 6 ft of the top of a retaining wall shall be no higher than 10 feet when both heights are added.

6. Cut and fill slopes greater than six (6) feet in height shall be terraced. Cut faces on a terraced section shall not exceed a maximum height of four (4) feet. Terrace widths shall be a minimum of three (3) feet to allow for the introduction of vegetation.
7. Total height of cut and fill slopes shall not exceed a maximum vertical height of fifteen (15) feet or less as recommended by the geotechnical report.
8. Retaining walls adjacent to streets and roadways must be capped and faced with an architecturally compatible concrete or cement material. Expanses of blank, featureless concrete are not permitted.
9. No retaining walls shall be built in the public ROW or PUE if feasible options exist for locating them on private property.

b) Building Design

1. All new structures in steep slope areas shall conform to the following standards:
 - a) Color selection for new structures shall be coordinated with the predominant colors of the surrounding landscape to minimize contrast between the structure and the natural environment. Earth tone colors and natural materials such as wood, natural brick, slump block walls, tile or earth tone shingles are recommended. Developers shall include such provisions in the CC&Rs for all developments in steep slope areas.
 - b) Houses to be located in hillside areas shall utilize special foundation designs such as split-level homes, cantilever foundations, stepped foundations, and other innovative designs to minimize ground disturbance and retain the natural contours of the site.
 - c) All foundation designs in steep slope areas shall be approved by a licensed structural engineer.
 - d) Use of "Class A" roofing materials shall be required in order to reduce fire hazards in the hillside areas. (UFC app. II-A 16 [a]. (Ask Heather about this)
 - e) Chimneys shall be equipped with spark arresters, and should not be located within 10 feet of trees. (UFC App. II-A, 7 & 16) (Ask Heather about this)

(11) Density Transfer.

- a) When a site contains both hillside areas and sizable areas of less than 15% slope, density transfer is encouraged to both protect the natural qualities of hillside areas and to promote residential development on slopes of less than 15%. Density shall only be transferred to areas of less than 15%. The amount of density available for transfer shall be calculated according to the following method:

STEP 1: Determine the area of the parcel(s) with average slope in each of the following categories:

- <15%
- 15-20%
- 20-25%
- 25-30%
- >30%

STEP 2: Determine the number of potential lots that could be permitted for the areas with average slopes over 15%. A figure of 40% ground disturbance shall be used for determining lot sizes.

STEP 4: Add the number of potential lots with slopes at or over 15% to determine the density that may be transferred to areas with an average slope of less than 15%.

- b) When the density transfer option is utilized, the following standards shall apply to the higher density portion of the site:

1. Lands over 15% shall be permanently maintained as open space in tracts or parks (does not count towards parkland dedication requirements of section Land Development Ordinance 5.26).
2. In no case shall the density of the development exceed 10 units per developable acre (excluding streets and open spaces)
3. In no case shall lot sizes be less than 4200 sqft.
4. Back and side yards shall be no less than 5 feet on a side.
5. Front yard setbacks shall be no less than 10 feet.
6. Garage setbacks shall be no less than 20 feet.
7. Exceptions to these setback requirements may be allowed by the Planning Official when necessary to provide a larger buffer between waterways or other natural resources and development.

8. Minimum average lot width for single family detached dwellings shall be 40 feet.

(12) Revegetation and Erosion Control. In hillside areas, the following erosion control standards apply:

- a) Between October 1st , and April 31st , cut and fill slopes and other areas of ground disturbance susceptible to erosion shall be protected with an erosion control netting, blanket or functional equivalent. Netting or blankets shall only be used in conjunction with an organic mulch such as straw or wood fiber. The blanket must be applied so that it is in complete contact with the soil so that erosion does not occur beneath it. Erosion netting or blankets shall be securely anchored to the slope in accordance with manufacturer's recommendations.
- b) Revegetation of disturbed areas to a degree sufficient to control erosion shall occur as follows:
 1. All areas of ground disturbance including cut and fill slopes and terraces shall be revegetated as soon after disturbance as practicable. Viability of plantings shall be ensured by introduction of sufficient top soil and the use of irrigation when necessary.
 2. All areas of ground disturbance located on private property shall be revegetated to a degree sufficient to control erosion prior to the issuance of a certificate of occupancy
- c) All measures installed for the purposes of long-term erosion control, including but not limited to vegetative cover, rock walls, and landscaping, shall be maintained by the property owners in perpetuity on all areas which have been disturbed, including public rights-of-way.

(13) Drainage

- a) To minimize sediment transport, stormwater facilities shall be, to the greatest extent feasible, the first improvements constructed on the development site.
- b) Detention ponds shall not be located in steep slope areas unless no other practical detention alternative is feasible as determined by the City Engineer. Developers shall utilize cascading swales or other dispersed detention designs where feasible to reduce the size of individual facilities and risk to life and property should a failure occur. Detention facilities shall be designed and located to be “failsafe” to the greatest degree practicable.
- c) Detention for a 10 year storm is required to ensure that post development peak flows do not exceed predevelopment conditions. The applicant shall show

how water from a 100 year storm will affect the system and detention facilities shall incorporate an emergency overflow to safely convey runoff from a 100yr storm to an acceptable disposal point.

- d) All detention ponds, cascading swales and other water holding features shall be designed by a geotechnical engineer or other engineer with demonstrable experience designing detention facilities in high slope areas as determined by the City Engineer.
- e) Improvement plans for detention facilities shall include a statement by the design engineer addressing compliance with the recommendations of the geotechnical report, and addressing design measures used to reduce the impacts of a failure of the facility.

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