



Oregon

Theodore R. Kulongoski, Governor

Department of Land Conservation and Development

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Salem, OR 97301-2540

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AMENDED NOTICE OF ADOPTED AMENDMENT

August 22, 2007

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: City of Roseburg Plan Amendment
DLCD File Number 006-06



The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. A copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: September 4, 2007

This amendment was submitted to DLCD for review 45 days prior to adoption. Pursuant to ORS 197.830 (2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE: THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.**

Cc: Gloria Gardiner, DLCD Urban Planning Specialist
John Renz, DLCD Regional Representative
Amanda Punton, DLCD Natural Resource Specialist
Marion Thompson, City of Roseburg

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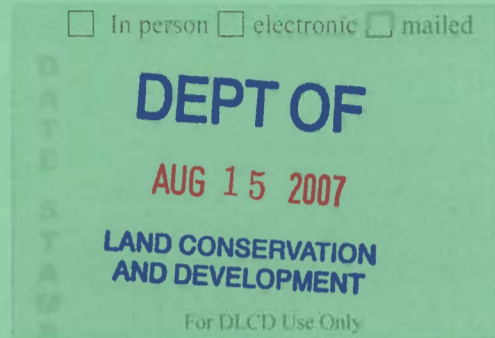
PROF 2

DLCD

Notice of Adoption

THIS FORM **MUST BE MAILED** TO DLCD
WITHIN 5 WORKING DAYS AFTER THE FINAL DECISION
PER ORS 197.610, OAR CHAPTER 660 - DIVISION 18

In person electronic mailed



Jurisdiction: **City of Roseburg**

Local file number: **LUDO-06-1**

Date of Adoption: **8/13/2007**

Date Mailed: **8/14/2007**

Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? **Yes** Date: 9/8/2006

- | | |
|---|---|
| <input type="checkbox"/> Comprehensive Plan Text Amendment | <input type="checkbox"/> Comprehensive Plan Map Amendment |
| <input checked="" type="checkbox"/> Land Use Regulation Amendment | <input type="checkbox"/> Zoning Map Amendment |
| <input type="checkbox"/> New Land Use Regulation | <input type="checkbox"/> Other: |

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".

An amendment to the City of Roseburg Land Use and Development Ordinance revised development standards that apply to areas having slopes greater than 12%. These areas are reference as Hillside Development/Geologic Review Areas. The adoption includes a map and submittal requirements. The underlying zoning, Comprehensive Plan Deisgnation, and allowed land uses were not changed by this Ordinance.

Does the Adoption differ from proposal? Yes, Please explain below:

The original draft went through extensive public review by a citizen's committee, Technical Advisory Group, a home building organization, as well as a number of public hearings at the Planning Commission and City Council. This resulted in significant changes from the orginial draft.

Plan Map Changed from: **N/A** to:

Zone Map Changed from: **N/A** to:

Location: **On lands in the City with slopes grater than 12%** Acres Involved:

Specify Density: Previous: **N/A** New: **N/A**

Applicable statewide planning goals:

- | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Was an Exception Adopted? YES NO

Did DLCD receive a Notice of Proposed Amendment...

DLCD # 006-06 (15539)

45-days prior to first evidentiary hearing? Yes No
If no, do the statewide planning goals apply? Yes No
If no, did Emergency Circumstances require immediate adoption? Yes No

DLCD file No. _____

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

Local Contact: **Marion J. Thompson, AICP** Phone: (541) 440-1177 Extension: 253
Address: **900 SE Douglas Avenue** Fax Number: 541-440-1185
City: **Roseburg** Zip: 97470- E-mail Address:
mthompson@cityofroseburg.org

ADOPTION SUBMITTAL REQUIREMENTS

This form **must be mailed** to DLCD **within 5 working days after the final decision**
per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and TWO Complete Copies (documents and maps) of the Adopted Amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540
2. Electronic Submittals: At least **one** hard copy must be sent by mail or in person, but you may also submit an electronic copy, by either email or FTP. You may connect to this address to FTP proposals and adoptions: webserver.lcd.state.or.us. To obtain our Username and password for FTP, call Mara Ulloa at 503-373-0050 extension 238, or by emailing mara.ulloa@state.or.us.
3. Please Note: Adopted materials must be sent to DLCD not later than **FIVE (5) working days** following the date of the final decision on the amendment.
4. Submittal of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.
5. The deadline to appeal will not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **TWENTY-ONE (21) days** of the date, the Notice of Adoption is sent to DLCD.
6. In addition to sending the Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

ORDINANCE NO. 3274

AN ORDINANCE AMENDING CHAPTER 1 ADDING TO SECTION 1.090, AMENDING CHAPTER 2, SECTION 2.3.075, CHAPTER 3, ARTICLE 1, SECTION 3.1.080.3, ARTICLE 35, SECTION 3.35.210.2, AND SECTION 3.35.700, OF THE CITY OF ROSEBURG LAND USE AND DEVELOPMENT ORDINANCE NO. 2981 AS AMENDED REGARDING HILLSIDE DEVELOPMENT

WHEREAS, the Roseburg Planning Commission has recommended amendments be made to certain sections of Chapter 3, Section 3.1.080 Overlay Districts, Section 3.35.210.3 – Access Grades, Section 3.35.700 – Geologic Hazards Overlay of the Roseburg Land Use and Development Ordinance No. 2981 as amended;

NOW, THEREFORE, THE CITY OF ROSEBURG HEREBY ORDAINS AS FOLLOWS:

SECTION 1: Chapter 1, Section 1.090 of the City of Roseburg's Land Use and Development Ordinance, as amended, is hereby amended to include the following additional language:

HILLSIDE DEVELOPMENT. The development of lands which may be planned and developed as a single unit or subdivision, or developed as individual lots, identified on the City Slope Map and/or having areas of slope greater than 12%, being subject to the provisions of Section 3.35.700 providing flexibility from traditional siting and land use regulations.

SECTION 2: Chapter 2, Article 3, Section 2.3.075.12 of the City of Roseburg's Land Use and Development Ordinance, as amended, is hereby amended to read and provide as follows:

12. Site Development – Excavation and Fill Placement. Excavation, fill placement, or removal of trees or ground cover shall require a permit from the Community Development Department if any of the following conditions apply.
 - The volume of fill placement or excavation exceeds 5 cubic yards for every 1000 square feet of land area.

- The proposed excavation will result in clearing 3,000 or more square feet.
 - The property contains all or portions of a river, stream, wetland, spring or other source where the continuous presence of water is indicated and which would be disturbed.
 - Lands within and identified on the City of Roseburg Slope Map or having slopes of greater than 12% shall comply with the requirements identified in Section 3.35.700.
- a. Exceptions. A site development permit shall not be required for the following activities:
- (1) Projects or developments which have received Site Plan Review approval.
 - (2) The installation and maintenance of public utilities and infrastructure such as water lines, water meters, pump stations, sewer lines, and streets by the City, Roseburg Urban Sanitary Authority, other utilities or their contractors.
 - (3) Removal of trees and ground cover in emergency situations involving immediate danger to life or property or substantial fire hazards.
 - (4) Removal of trees, ground cover or obnoxious vegetation on partially developed property for purposes of general property and utility maintenance, fire hazard removal, landscaping, or gardening without the use of a bulldozer or similar mechanical equipment.
- b. Application and Submittal Requirements. The application shall include, at a minimum, the following information.
- (1) Map/Plan: The submitted map/plan shall include date, north arrow, location of adjoining streets, structures and property, existing utilities, scale, contours at no more than 2-foot intervals.
 - (2) Property description(s): Legal description including accurate property lines and boundaries.
 - (3) Planned Improvements: Proposed location of all improvements, including but not limited to structures, utilities, roads, storm drainage, and retaining structures.
 - (4) Topography: Natural features, tree groupings, rivers, streams, wetlands or other geographical features.
 - (5) Stabilization/Erosion Control Method(s): Proposed methods for bank stabilization, erosion control plan and measures (DEQ requirements) and land restoration.

- (6) Vegetation/soils: General description and notation of trees and ground cover; general description of soils and characteristics. Subject to review, certain development projects may require a geo-technical report.
 - (7) Grading Plan: Plan including cut and fill areas, existing and finish grades and slope height.
 - (8) Drainage: Drainage plan complying with the Storm Drainage Master Plan.
 - (9) Supplementary Information: Name and address of property owner.
- c. Written Information:
- (1) Project Description: General description of the proposed project.
 - (2) Schedule: Proposed time schedule for excavation, land clearing, or fill placement, land restoration, bank stabilization and erosion control and future development.
 - (3) Additional Permit(s): Permit approvals or applications from other agencies such as the Oregon Division of State Lands, Oregon Department of Environmental Quality or The U.S. Army Corps of Engineers shall be provided at the time of application submittal.
 - (4) Other: Other information as deemed necessary by the Community Development Department in order to adequately review and approve the application.
- d. Minimum Requirements:
- (1) Each permit approval shall be subject to the requirement that all ground stabilization be maintained and not be allowed to deteriorate.
 - (2) Removal of vegetation shall not occur more than 30 days prior to grading or construction.
 - (3) If a building permit is issued as part of the project, the requirements of the excavation/land-clearing permit shall be completed prior to framing or set-up. Erosion control and stabilization methods shall be in place prior to and during the entire construction phase of the project.

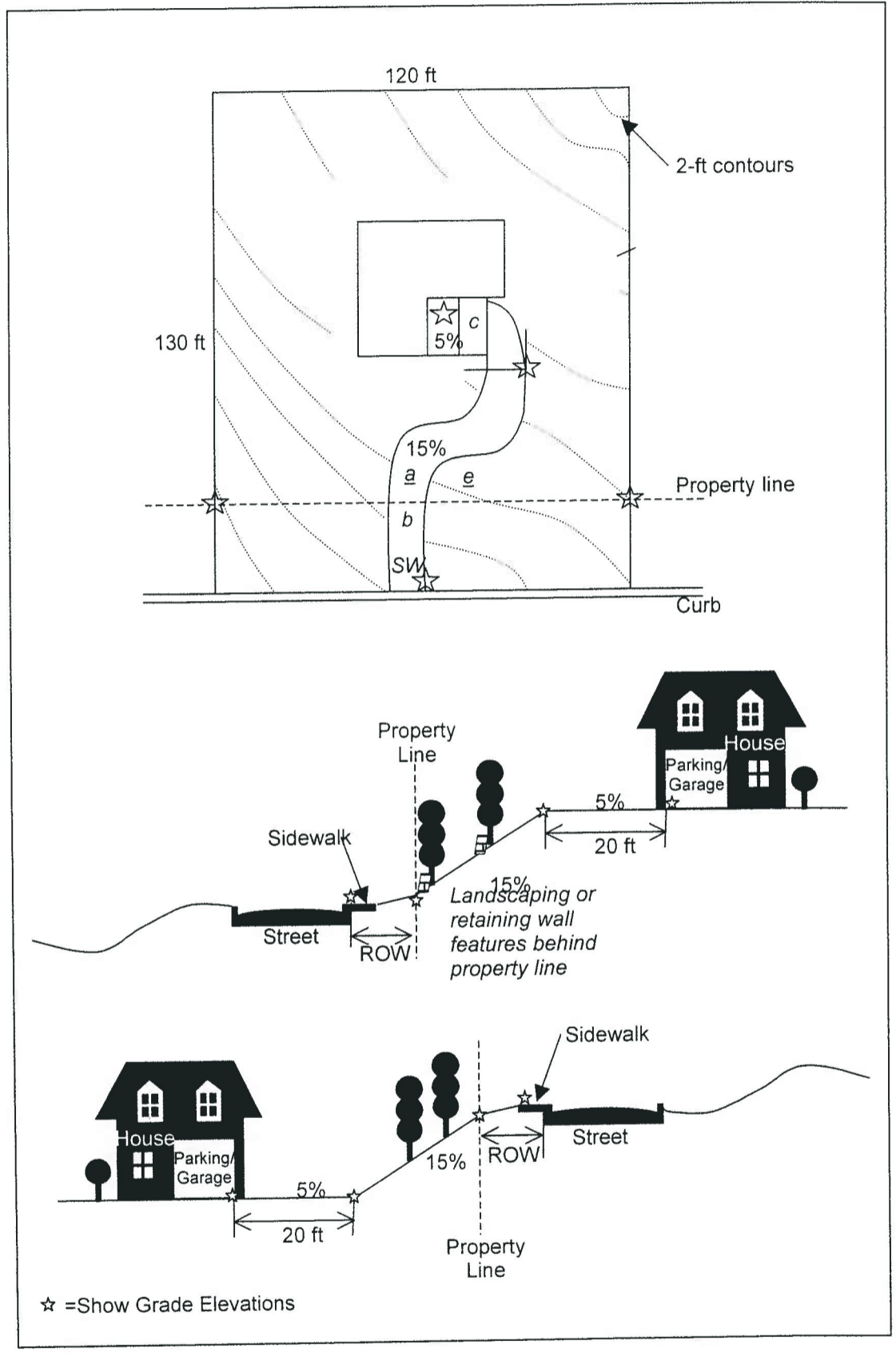
SECTION 3: Chapter 3, Section 3.1.080.3 of the City of Roseburg's Land Use and Development Ordinance, as amended, is hereby amended to read and provide as follows:

- 3. Hillside Development/Geologic Review Area (HD). A Hillside Development/Geologic Review Area is particularly applicable to areas of active or potential mass movement (landslide areas) and to all area identified on the City of Roseburg Slope Map adopted

by reference herein and/or greater than twelve percent (12%) slope. Prior to development approval, assurance shall be made that the public health, safety, and welfare is not jeopardized by land use or development being proposed. Such approval shall be pursuant to Section 3.35.700 of this Ordinance.

SECTION 4: Chapter 3, Article 35 Section 3.35.210.3 Access Grades of the City of Roseburg's Land Use and Development Ordinance, as amended, is hereby amended to read and provide as follows:

3. Access Grades. Driveways used to access on site parking and as further defined by the Figure below, titled Driveway Access Grade, shall comply with the following criteria:
 - a. Maximum grade of driveway from property line to face of garage shall not exceed 15% at any point and shall be graded to allow clearance to pass an automobile eighteen (18) feet in length.
 - b. When it is determined necessary at the time of site plan review to provide for emergency apparatus access, access drives exceeding 30 feet in length are to provide a minimum 20 feet wide paved area back from the face of the garage/parking not exceeding 5% grade.



DRIVEWAY ACCESS GRADES FIGURE

SECTION 5: Chapter 3, Article 35, Section 3.35.700 GEOLOGIC HAZARDS OVERLAY of the City of Roseburg's Land Use and Development Ordinance, as amended, is hereby amended and new Sections 3.35.705, 3.35.710, 3.35.715, 3.35.720, 3.35.725, 3.35.730, 3.35.735, and 3.35.740, are hereby added, all to read and provide as follows:

SECTION 3.35.700 PURPOSE AND INTENT

The intent of Sections 3.35.700 through 3.35.740 is to provide regulations for development in hillsides that relates to topography, geology, hydrology, and fire risks. These regulations relate to the steepness of slopes and geologic conditions. The specific purpose of the Section is to ensure that Hillside Development occurs in a manner that:

- Ensures public health, safety, and general welfare.
- Provides for appropriate Hillside Development consistent with the allowed density provided by the zoning classifications.
- Addresses potential risks that can result from steeply sloped sites and geologic hazard areas.
- Minimizes potential hazards from fire, water, and unstable soils.
- Helps ensure stability of steep slopes and protection of environmental resources.

The provisions of Sections 3.35.700 through 3.35.740 are intended to provide flexible development standards while reducing potential risks associated with:

- Hillside Erosion
- Sedimentation on lower slopes
- Damage from landslides

SECTION 3.35.705 DEFINITIONS

For the purpose of Sections 3.35.700 through 3.35.740, the following terms and phrases apply. If the general definitions in Section 1.090 of the *City of Roseburg Land Use and Development Ordinance* (LUDO) conflict, the following definitions take precedence:

American Public Works Association: APWA.

Bench: A relatively level step excavated into earth material on which fill is to be placed.

Benching: The sidewall cutting in a stair step configuration, which minimizes the height of each vertical surface and reduces the total volume of soil removed.

Best Management Practice (BMP): A practice used to reduce negative impacts from a particular land use.

Certified Engineering Geologist: A Registered Geologist who is certified in the specialty of Engineering Geology under provisions of Oregon Revised Statutes (ORS) 672.505 to 672.705.

Clear Zone (Fire): An encircled area surrounding a building where brush, trees, and other vegetation nearby are modified or eliminated, to provide a defensible space. A clear zone

may help alleviate the spread of fire and/or provide space for fire suppression equipment in the event of an emergency.

Clearing: The cutting, moving on the site, or removal of standing or fallen timber; the removal or moving on a site of stumps; or the cutting and removal of brush, grass, ground cover, or other vegetative matter from a site in a way that exposes the surface of the site.

Construction Area: The total area of alteration of the naturally occurring ground surface resulting from construction activities.

DEQ: Department of Environmental Quality

Engineering Geology Report: A report by a State of Oregon Certified Engineering Geologist that provides a detailed description of the geology of the site, professional conclusions and recommendations regarding the effect of geological conditions on the proposed development, and opinions and recommendations covering the adequacy of the site to be developed.

Erosion: The wearing away of earth's surface as a result of movement of wind, water, or ice.

Erosion Control: Measures that provide for erosion and sediment control for any clearing, grading, excavating, or stockpiling of material, including areas of less than 1 acre of land and which do not require a DEQ 1200-C NPDES General Permit.

Excavation (Cutting): The mechanical removal of earth material.

Fill Material: A deposit of earth or other natural or man-made material placed by artificial means.

Filling: The act of placing fill material, including the temporary stockpiling of fill material.

Geotechnical Engineer: 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.

Geotechnical Report: A report prepared and stamped by a State of Oregon Registered Geotechnical Engineer evaluating site conditions and recommending design and mitigation measures. This report will include steps necessary to reduce risks associated with development and to facilitate a safe and stable development. A geotechnical report must be prepared in accordance with the report requirements identified in on the approved and adopted checklist on file the Community Development Department.

Grading/Ground Disturbance: Any excavating and/or filling of the earth's surface or combination thereof that falls within the provisions of Section 2.3.075.12 or Chapter 4 of this Ordinance.

High Risk (Fire): Areas considered having a high-risk fire potential due to the type of vegetation on site, as well as climate, wind, and geographic conditions. Areas where, if fire occurs, it would prove difficult to access or suppress; developing areas with excessive fuel loadings (e.g., vegetation); developing areas lying outside a fire protection district; developing

areas adjacent to public lands where terrain and fuel loads pose an increased fire risk; areas with a lack of water resources for fire suppression; areas where pending development may compound fire risk; areas where, if fire starts, it could spread to sensitive areas, such as community watersheds, archeological resources, wildlife habitat, oil or gas fields, etc.; and residential areas in which escape routes are the same as those routes fire fighting trucks and equipment would use in emergencies.

Hillside/Geologic Review Areas: Any property within and identified on the City of Roseburg Slope Map adopted by reference herein or lands having slopes greater than 12%.

Landslide: Abrupt down slope movement of a mass of soil or rock.

Liquefaction: A process in which soil loses strength and behaves like a liquid.

Mansard Roof: A roof that has two slopes on any of the sides. The lower slope is steeper than the upper slope.

Mitigation: An action designed to avoid, minimize, or eliminate project-induced impacts.

NPDES: National Pollution Discharge Elimination System.

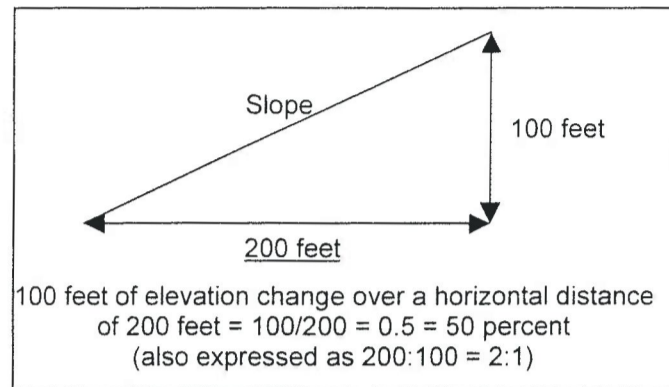
ODOT: Oregon Department of Transportation.

ORS: Oregon Revised Statutes.

Right-of-Way: An area of land typically extending from the property/lot line of an abutting lot or parcel; intended primarily to be occupied by streets, public utilities, infrastructures, sidewalks, curbs, and gutters.

Slope Setback: A building's clearance (horizontal distance from an ascending or descending slope). Setbacks are required in most situations where a structure is to be built near a slope.

Slope: An inclined earth surface, the inclination of which is expressed as the ratio of vertical distance to horizontal distance. In these regulations, slopes are generally expressed as a percentage; percentage of slope refers to a given rise in elevation over a given run in distance. A 50 percent slope, for example, refers to a 100-foot rise in elevation over a distance of 200 feet. A 50 percent slope is expressed in engineering terms as a 2:1 slope as shown on the Figure below titled Percent/Slope Calculations.



PERCENT/SLOPE CALCULATION FIGURE

Step-backs: Successive stories that recede farther back from the lower story. Step-backs are established to avoid excessive bulk of a structure.

Terrace: A relatively level step constructed in the face of a graded slope for drainage and maintenance purposes.

SECTION 3.35.710 APPLICABILITY

The Hillside Development regulations outlined in Sections 3.35.710 through 3.35.740, and application checks referenced herein which are hereby incorporated and are adopted, apply to areas within and identified on the City of Roseburg Slope Map, which is hereby adopted by reference and incorporated herein, or on lands having slopes greater than 12%.

1. Procedures
 - a. The Director of the Community Development Department shall have the authority to review Hillside Development pursuant to Article 3, Section 2.3.050.
 - b. For development on lots or parcels platted before the date of the enactment of this Section or for which no other administrative, Planning Commission or Legislative action is required, the Director shall provide an informational/courtesy notice of the proposal to all property owners within one hundred feet (100') of the subject property. The notice shall include:
 - i. The location, a description of the subject property, reasonable calculations to identify the actual property, and
 - ii. Explain the nature of the proposal including such things as type, size, and scope.

2. Application and Submittal Requirements
 - a. No lands identified by the City of Roseburg Slope Map or having a slope greater than 12% shall hereafter be developed or physically altered until plans have been approved in accordance with the provisions of this Section 3.35.700.
 - b. Applicants for residential Hillside Development are advised to schedule a pre-application conference with the Community Development Department to acquaint

themselves with the requirements of this Ordinance, the *City of Roseburg Comprehensive Plan*, and development requirements. For development of one single-family unit on an existing lot of record, a pre-application conference is encouraged, but not required.

- c. A pre-application shall be submitted to the Director of Community Development ten (10) working days prior to the scheduled pre-application conference. The pre-application submittal is to include a completed pre-application form along with appropriate maps and preliminary plans. Refer to the Hillside Development Application Checklist on file with and available from the Community Development Department for guidance on the type of conceptual information to provide.
- d. Approval of hillside development shall require a complete application form being submitted to the Director of Community Development, along with appropriate items identified in the pre-application conference record, conforming to the requirements set forth in Site Plan Review, Article 3, Section 2.3.075 of this Ordinance, and shall include required plans and map, the Geotechnical Report per the items specified in Requirements A or A1 and required by the Hillside Development Application Checklists C, C1, or C2, on file with the Community Development Department. Plans submitted to the Director of Community Development shall consist of maps, drawings, written descriptions, and other materials necessary and appropriate to determine that the proposal conforms to the requirements of this Ordinance.

3. Final Plans/As-Builts

- a. Preliminary drawings shall be submitted with the initial development application.
- b. Final drawings shall be submitted prior to issuance of building permits.
- c. As-built drawings shall be submitted within 30 days of project completion.

SECTION 3.35.715 DEVELOPMENT CRITERIA AND STANDARDS

When a proposal is submitted for land division, Planned Unit Development and/or Site Plan Review said development shall comply with the following criteria and standards:

1. The permitted density is established by the underlying zoning for lands in Hillside/Geologic Review Areas. Density may be relocated to less steep sloped areas of the property in order to reduce the amount of cut and fill, allow for cluster development, as well as other development concepts such as zero-lot line, attached single family, etc. In cases where the allowed density will be relocated thereby leaving steeper slopes undistributed, a density increase will be allowed based on the gross acreage and slope category of the undeveloped area as listed below.
 - a. Level 1 - the density for slopes greater than 12% and up to 25% shall be increased by 1 unit per gross acre for the area to be left undeveloped regardless of the underlying zoning.

- b. Level 2 - the basic density for areas with slopes greater than 25% and up to 35% shall be increased 2 units per gross acre for that area left undeveloped.
- c. Level 3 - the basic density for areas with slopes greater than 35% shall be increased by 4 units per gross acre for that area to be left undeveloped.

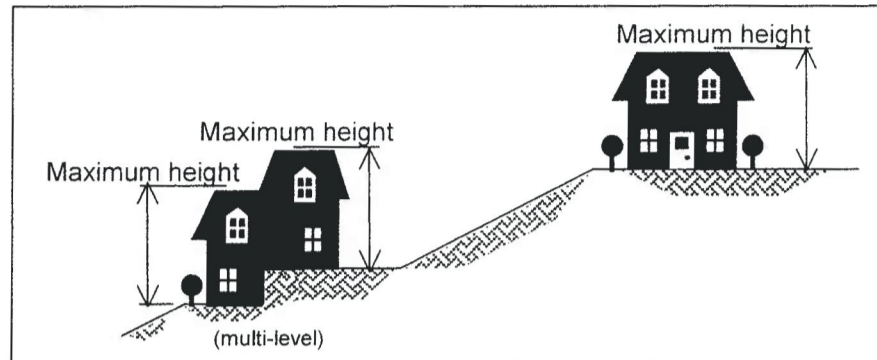
In order to verify allowed increases in densities beyond that allowed by the underlying zoning classification and to establish the ultimate permitted density, slope density calculations shall be submitted on forms furnished by the Community Development Department. As a condition of density transfer, a deed restriction that assures permanent retention of the transfer land area as open space shall be recorded with the Douglas County Recorder within 30 days of the site review approval.

2. Location/Features

- a. Cluster, zero lot-line, and other similar development is permitted in the Hillside/Geologic Review Area and is encouraged as a means of preserving the natural hillside, reducing ground disturbances, and limiting vegetation removal. Under this concept, buildings should be grouped to leave steeper slopes undisturbed.
- b. Development plans are to indicate slope percentages by shading. If density transfer is requested, plans are to include calculations to indicate the amount of area and available density to be applied elsewhere within the development.

3. Hillside Height Measurement

- a. The maximum allowable building height shall comply with the underlying zoning standards.
- b. Building height shall be measured as the vertical distance from the existing or planned grade of the pad or from the level of the first occupied floor elevation to the highest point of the roof for flat roofs; to the deck line of mansard roofs; and to the average height between the eaves and the ridge for gable, hip, and gambrel roofs as demonstrated in the Figure titled Building Height Measurement Procedure. For split-level construction, each building component shall be measured from the site pad or floor level at the point of the building foundation on which that component is located. Multi-level structures are encouraged to provide step-backs as a way of reducing the mass and bulk of such structures.



BUILDING HEIGHT MEASUREMENT PROCEDURE FIGURE

4. Lot Size

Minimum lot sizes and dimensions in the Hillside/Geologic Review Area shall be established with the site plan review, land division, or Planned Unit Development based on the type of structures (e.g., detached single-family dwellings, attached single-family dwellings, zero lot line), but shall not be less than a minimum of 3,000 square feet for each detached single family dwelling unit(s), and shall provide for, but not be limited to, the following:

- a. Density consistent with that permitted by the underlying zoning or that established by the slope density Level shown on the required slope density map.
- b. Conform to mitigation measures identified in the Geotechnical Report.

5. Yard Setbacks

Lots shall provide yard setbacks consistent with the underlying zoning or those recommended in an approved Geotechnical Report.

6. Pads

Split pad or stepped footings shall be used when possible to allow the structure to more closely follow the slope.

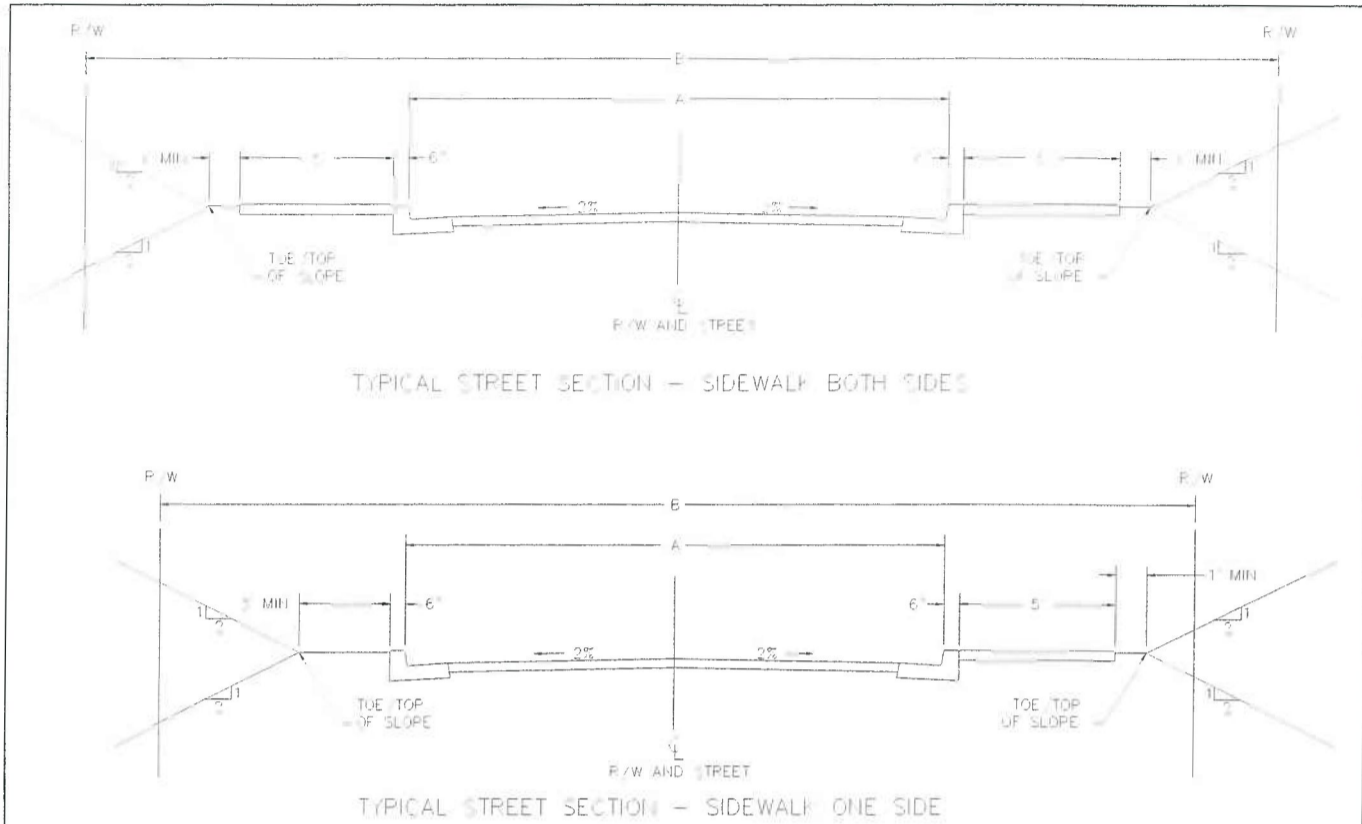
7. Foundations

- a. Foundations shall be in conformance with the requirements of Geotechnical Report and if required designed by a Geotechnical or Professional Engineer as provided by ORS 672.002 to 672.325.
- b. Split-level foundations are encouraged when appropriate for the site contours.
- c. When appropriate, based on recommendations included in the Geotechnical Report, multi-level building footprint shall be used to reduce scarring.

8. Access Standards

- a. Streets shall meet the standards included in the latest adopted *City of Roseburg Transportation System Plan* and as adopted by the Department of Public Works construction standards that are in effect at the time of the proposed development.
- b. Alternative street standards depicted herein may be used in Hillside Developments as shown in the Figure titled Hillside Street Alternatives, unless otherwise required by the Director of Public Works and justified by the Geotechnical Report. Dead end streets shall have an approved turn-around area, however, dead end streets are discouraged.
- c. Streets are to follow the natural terrain whenever feasible. Travel ways, walkways, and parking areas are to be designed to parallel the natural contours of the site.
- d. Driveways used to access on site parking shall comply with the following criteria as further defined by the Figure titled Hillside Driveway Access Grades:
 - (1) Maximum grade of driveway from property line to face of garage shall not exceed 15% at any point and shall be graded to allow clearance to pass an automobile eighteen (18) feet in length, except as provided otherwise herein.
 - (2) Maximum grade of driveway between the back of curb to the property line, within the right-of-way, shall not exceed 5% and shall be graded to allow for clearance to pass an automobile eighteen (18) feet in length.
 - (3) When determined necessary at the time of site plan review, to provide for emergency apparatus access, access drives exceeding 20 feet in length may need to provide a minimum 20 feet wide paved area back from the face of the garage/parking not exceeding 5% grade.
 - (4) Landscape features, retaining wall, fences, and other elements shall comply with clear vision requirements and shall be located solely behind the property line.
 - (5) Unless otherwise approved, in the cases of a curved driveway, the inside turning radius and outside turning radius shall not be less than 28 feet and 48 feet respectively, measured from the center point to provide for emergency apparatus access.
- e. With the approval of the Fire Chief, driveways that are greater than 100 feet in length may have intermittent sections of grades up to a maximum of 20% provided that:
 - (1) The 100-foot distance back from the structure maintains the 15% grade described herein.
 - (2) Travel widths, turnouts, and level pad areas are provided as determined necessary for fire protection and emergency access purposes.
 - (3) An approved fire apparatus turnaround area having a grade no greater than 10% is provided.

- f. Driveways shall conform to the width requirements of Section 3.35.210; however, the Director of Public Works and the Fire Chief may require additional width in order to meet the purpose and intent of this Ordinance.
- g. Parking shall meet the requirements of Section 3.35.100; in addition, when driveways exceed 150 feet in length, one additional on-site paved parking area shall be provided for each additional 50 feet up to a maximum of five (5) spaces.



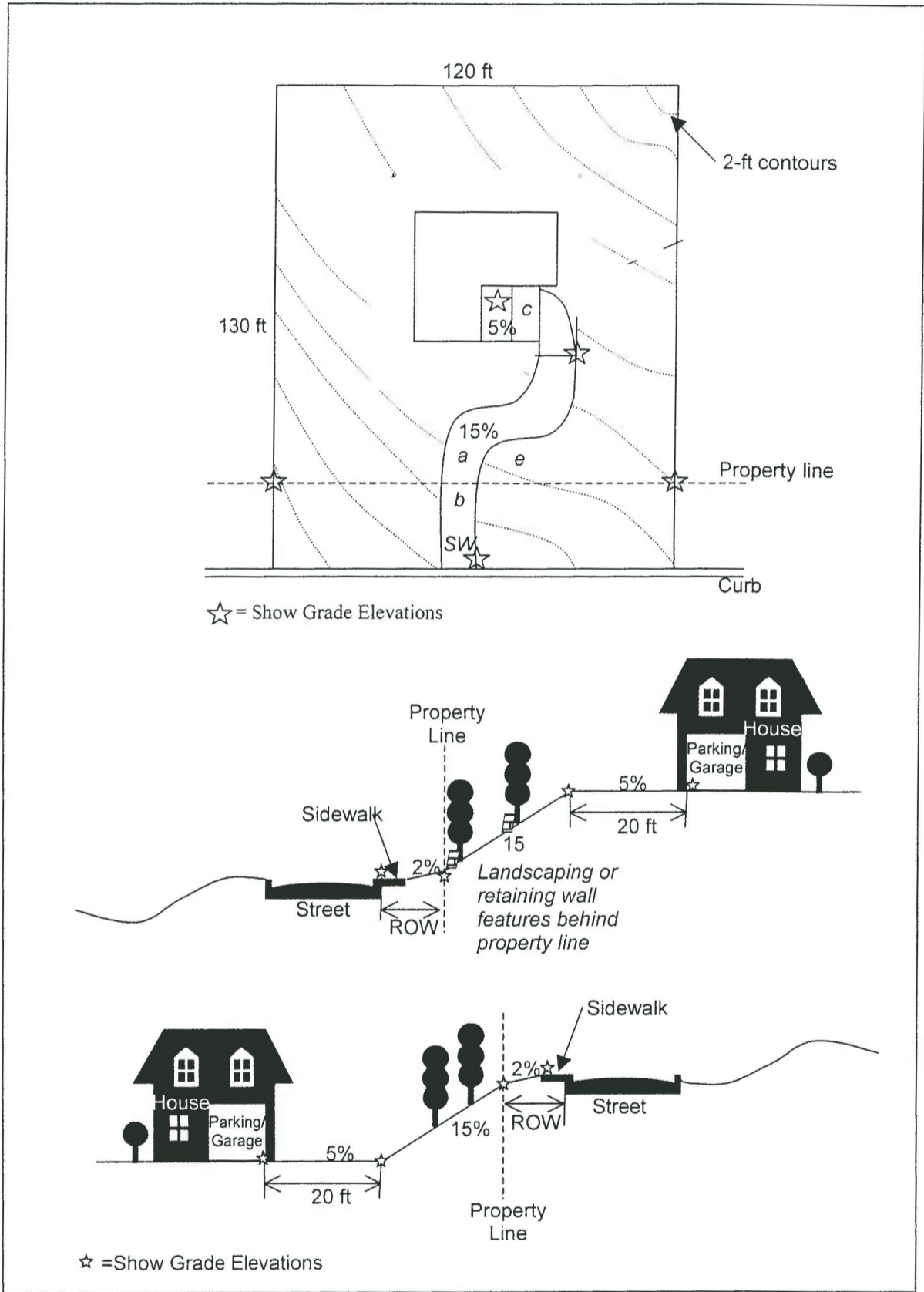
Street Designation	ROW Width "B"*	Paving Width "A"			Sidewalks**
		No Parking	Parking One Side	Parking Two Sides	
Local hillside residential streets	40 ft	24 ft	-	-	1 @ 5 ft
	40 ft	-	28 ft	-	1 @ 5 ft
	45 ft	-	-	34 ft	1 @ 5 ft
	45 ft	24 ft	-	-	2 @ 5 ft
	45 ft	-	28 ft	-	2 @ 5 ft
—	50 ft	-	-	34 ft	2 @ 5 ft
Collector hillside residential streets with shared bike route permitted in place of standard collector subject to the provision below***	40 ft	28 ft	-	-	1 @ 5 ft
	50 ft	-	36 ft	-	1 @ 5 ft
	55 ft	-	-	42 ft	1 @ 5 ft
	45 ft	28 ft	-	-	2 @ 5 ft
	55 ft	-	36 ft	-	2 @ 5 ft
	60 ft	-	-	42 ft	2 @ 5 ft

* Slope easement or additional ROW may be required for cut and fill slopes. Cut and fill slopes necessary for street constructions are not allowed on private property unless a slope easement is obtained. No retaining walls or armoring rock allowed within ROW

** Sidewalks required on both sides of street unless the natural cross slope exceeds 15 percent or approved by Public Works Director.

*** Allowed where a demonstrated projection of a lack of bike use or where the cost of bike lane improvements would be excessively disproportionate to the need or probable use
Lanes may have an offset centerline to allow wider uphill lanes to accommodate bicycles.

HILLSIDE STREET ALTERNATIVES FIGURE



HILLSIDE DRIVEWAY ACCESS GRADE FIGURE

SECTION 3.35.720

GENERAL REQUIREMENTS

The following requirements are generally the minimums that apply to lands shown on the City of Roseburg Slope Map or having a slope of greater than 12%; however, based on information provided by an accepted and approved Geotechnical Report verifying that the intent and purpose of this Ordinance is being carried out and appropriate mitigations are identified and in place, the Director of Community Development is authorized to allow for the recommendations contained in said report that may differ from the strict application of the following:

1. Development Time Periods

Grading, drainage improvements, or other ground disturbances on slopes of greater than 12% shall occur from April 15 to October 15; however, nothing in the Ordinance shall preclude immediate action to be taken in cases of emergency.

2. Grading Requirements

Preliminary grading plans shall be consistent with the latest version of the International Building Code (IBC), as amended by the State of Oregon, and shall comply with the Hillside Development Application Checklist available from the Community Development Department.

3. Excavation Requirements

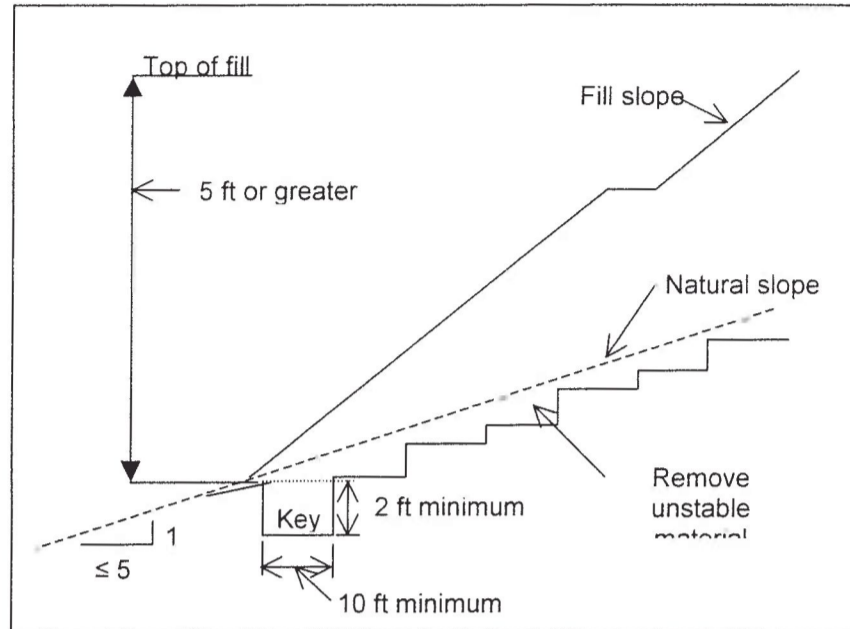
Excavation requirements shall be consistent with the latest version of the IBC, as amended by the State of Oregon.

a. Cut Requirements

- (1) The slope of cut surfaces shall be no steeper than is safe for intended use and shall be no steeper than 2 horizontal to 1 vertical as shown on the Figure titled Percent/Slope Calculations.

b. Fill Requirements

- (1) Ground surfaces shall be prepared to receive fill by removing vegetation, topsoil, and other unstable materials, and scarifying the ground to provide a bond with the fill material.
- (2) Where existing grade is at a slope steeper than 5 horizontal to 1 vertical (20%) and the depth of the fill exceeds 5 feet, benching shall be provided in accordance with the Figure titled Benching Details.



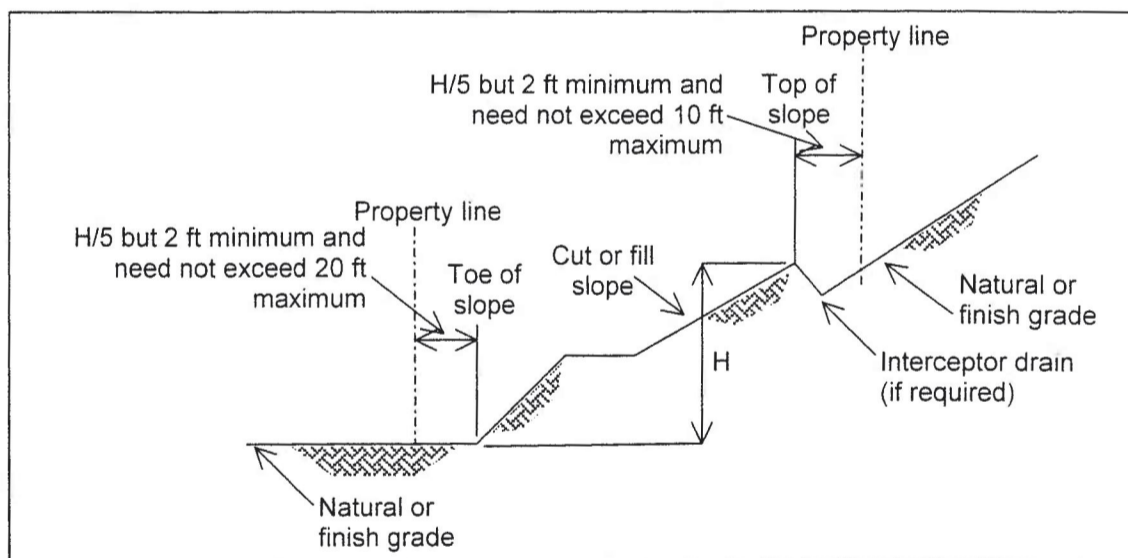
BENCHING DETAILS FIGURE - *Source IBC 2003.*

- (3) Fill material shall not include organic, frozen, or other deleterious material. No rock or similar irreducible material greater than 12 inches in any dimension shall be included in fills.
- (4) All fill materials shall be compacted to a minimum of 95% of maximum density per ASTM D-698 Standard Proctor Test.
- (5) The slope of fill surfaces shall be no steeper than is safe for the intended use and shall be no steeper than 2 horizontal to 1 vertical (50%).

4. Slope Setbacks Requirements for Cut/Fill Slopes

Slope Setback requirements shall be consistent with the latest version of the IBC, as amended by the State of Oregon.

- a. Cut and fill slopes shall be set back from property lines in accordance with this section. Slope setback dimensions shall be measured perpendicular to the property line and shall be as shown in Figure titled Drainage Dimensions.
- b. The slope setback at the top of a cut slope shall be as shown in Drainage Dimensions Figure, or what is required to accommodate any required interceptor drains.
- c. Where required to protect against adjacent properties at the toe of a slope from adverse effects of the grading, additional protection shall be included. Such protection may include but shall not be limited to:
 1. Setbacks greater than those required by Drainage Dimension Figure.
 2. Provisions for retaining walls or similar construction.
 3. Erosion protection of the cut and fill slopes.
 4. Provision for the control of surface water.



DRAINAGE DIMENSIONS FIGURE - Source IBC 2003.

5. Erosion Control Requirements

6. Erosion control measures shall meet the latest adopted *DEQ Erosion and Sediment Control Manual* for erosion control requirements, including but not limited to:

- (1) Construction of any building that disturbs one acre or more of land through clearing, grading, excavating, or stockpiling of fill material requires a DEQ 1200-C NPDES General Permit. This permit requires an Erosion and Sediment Control Plan and BMPs to be incorporated into

land-disturbing construction work. BMPs are used on the project site to prevent erosion and control sediment runoff from the project site. Erosion control BMPs can be found in DEQ Construction Storm Water Permit Guidance 1200-C NPDES General Permit (2006).

- (2) For construction on land of less than one acre, the minimum BMPs to consider include:
 - A responsible agent shall be designated during project construction.
 - Scheduling to avoid earth-disturbing activities during wet weather.
 - Perimeter sediment controls.
 - Storm drain inlet protection.
 - Site entrance and exit controls.
 - Non-storm Water pollution controls, such as materials use and waste management BMPs.
 - Covering or otherwise protecting stockpiles.
 - Projects that include slopes susceptible to erosion, including runoff and erosion prevention measures (see *DEQ Erosion and Sediment Control Manual Sections 4 and 5 respectively*).
 - The designated project agent or engineer should inspect BMPs regularly to identify areas in need of maintenance or improvement to minimize pollutant discharges.
 - Provide and maintain check dams in area where a concentration of water runoff may transport sediment.
- (3) All man-made slopes four feet or higher are to be planted with plantings suited to hillsides that will aid in erosion control and slope stability. Such plantings are to be appropriately irrigated until established and are self-sufficient.

7. Storm Water Drainage Requirements.

Storm Water drainage shall meet the City of Roseburg's current storm water design requirements in the latest version of *City of Roseburg Storm Water Management Design Standards*.

8. Construction Standards shall meet the requirements in the latest adopted City of Roseburg Public Work's *Construction Specifications and Standards Drawings*.
9. Encroachment in the public right-of-way shall not be permitted, unless a revocable permit is granted by the Department of Public Works.

10. Terraces and Retaining Structures

- a. Steep cut or fill slopes greater than 2:1 shall be retained with engineered retaining structures, such as stacked rock, retaining walls, rock buttresses or a functional equivalent engineered structure to control erosion and stabilize slope.
- b. Cut faces on terraced sections shall not exceed a maximum height of 15 feet.
- c. Terrace widths shall be a minimum of 3 feet for vegetation.
- d. Total cut slopes are not to exceed a maximum vertical height of 40 feet, provided that there is terracing at least every 15 feet in height to discourage massive slopes and encourage terraced landscape slopes.
- e. Retaining structures greater than 4 feet in height, as measured from the bottom of the footing to the highest point, are required to be engineered. Retaining structures at the toe of a slope or within 6 feet of a foundation shall be engineered regardless of height.
- f. Retaining structures shall follow the natural contours of the slope where feasible, and all materials used to construct retaining structures shall consist of native stone, poured-in-place concrete, pre-cast concrete block, or other approved material determined to be similar to and consistent with the those materials listed herein.

SECTION 3.35.725

VEGETATION REQUIREMENTS

1. Stabilization

- a. Prior to the removal of vegetation, including trees, and in conjunction with the required Geotechnical Report, an analysis shall be submitted to identify the slope stability with and without such plantings. Based on the information contained in the report, measures shall be implemented to assure that the intent and purpose of this Ordinance is met, including tree replacement.
- b. Notwithstanding the provision listed above; generally, thinning is preferred over removal of native and specimen trees.
- c. Ground disturbances outside the established building pad is to be done in such a manner so that the maximum number of trees can be preserved with care taken to preserve specimen trees.

2. Protection

The following criteria apply when specimen trees or trees having a trunk diameter of 18 inches or greater, as well as other existing or proposed vegetation or plantings located outside the boundaries of the property being developed, require protection during the construction process:

- a. Construction site activities, including material storage, are to be located and arranged so as to prevent disturbances of designated tree protection areas. Areas to remain undisturbed are to be protected with temporary fencing.
- b. Vegetation outside the construction site boundary, as well as other vegetation designated on the approved plans is to be protected by installing temporary fencing. This includes trees, major roots, and other vegetation not specifically designated for removal.
- c. Fencing is to be placed, at a minimum, along the dripline of the tree(s) that will be preserved, unless an alternative placement is approved. The location and type of the protective fencing shall be shown on approved plans.
- d. Use of equipment of a size and type that, under prevailing site conditions, will do the least amount of damage to preserved vegetation may be specified as a condition of approval. Equipment and materials shall be kept off of critical root zones. Equipment and materials shall be restricted to the construction site boundary. No material or equipment shall enter or be placed in the areas protected by fencing or outside the construction areas without prior approval.

3. Re-vegetation

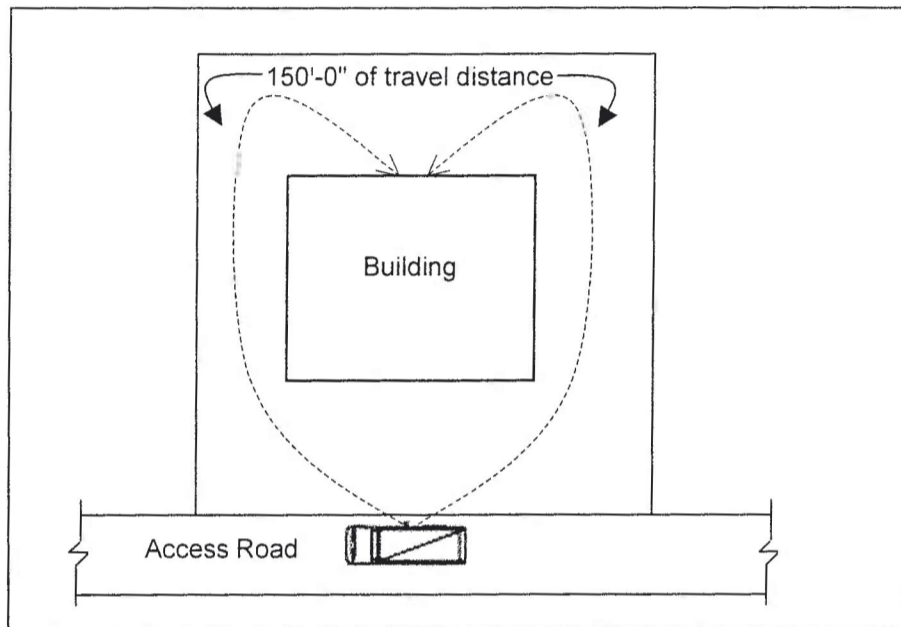
The following criteria apply when lands will be re-vegetated

- a. Native or species similar to those removed are preferred for re-vegetation.
- b. Re-vegetation should be installed to provide slope stabilization and to reduce the visual impact of cuts.
- c. Maintenance of re-vegetated areas is required until plantings are established.
- d. Vegetation within:
 - (1) 30 feet on slopes of greater than 12% to 25%;
 - (2) 50 feet on slopes of greater than 25 to 35%; and
 - (3) 70 feet on slopes greater than 35%.

of any building shall be especially fire resistant, irrigated, and carefully spaced to minimize the threat from intense flames and sparks. Fire resistant plants may be chosen from Fire-Resistant Plants for Oregon Home Landscapes (2004) or other sources.

SECTION 3.35.730 FIRE PROTECTION

1. Within 150 feet of all portions of a facility and all portions of the exterior wall of the first story of the building, an approved route around the building or facility to serve as, and meeting the requirements of, a Fire Apparatus Access Route shall be provided as shown in Figure titled Fire Apparatus Access Road.



FIRE APPARATUS ACCESS ROAD FIGURE

2. In areas of high risk, there shall be a clear zone around buildings. Clear zones shall increase with the increase in slope as follows:
 - (1) 30 feet on slopes of 12% to 25%;
 - (2) 50 feet on slopes greater than 25% to 35%; and
 - (3) 70 feet on slopes greater than 35%.
3. The following standards are applicable in high risk areas:
 - a. The volume of vegetation within the clear zone will be kept to a minimum. Plants and trees shall be limited to carefully spaced fire resistant species.
 - b. Automatic systems shall be required where access for fire equipment and water supply is not available.
 - c. Noncombustible building materials shall be used in areas of high risk.
4. Conditions of approval may require additional clear zones as listed in the *Firewise Landscaping Checklist* (2006).
 - a. Zone 1. This well-irrigated area encircles the structure for at least 30 feet on all sides, providing space for fire suppression equipment in the event of an

emergency. Plantings should be limited to carefully spaced, low flammability species.

- b. Zone 2. Low flammability plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.
- c. Zone 3. Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation (fuel) low.
- d. Zone 4. This furthest zone from the structure is a natural area. Selectively prune and thin all plants and remove highly flammable vegetation.

SECTION 3.35.735 BLASTING

Blasting methods shall be consistent with *Section 00335 – Blasting Methods and Protection of Excavation Backslopes in ODOT/APWA Oregon Standards Specifications Part 00300 – Roadwork (2002)*, and be in conformance with the requirements of the *City of Roseburg Municipal Code*.

SECTION 3.35.740 ENFORCEMENT

The City's enactment and enforcement of this Ordinance shall not be construed for the benefit of any individual person or group of persons other than the general public.

As provided herein, the Director of Community Development is given the authority to interpret, apply, and enforce this Ordinance to accomplish the stated purpose.

The City may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this Ordinance.

The City is authorized to make site inspections and take such actions as necessary to enforce the provisions of this ordinance. A City representative may enter onto private property with the consent of the owner, occupant, or pursuant to warrant. When a designated hillside area has been altered in violation of this Ordinance, all ongoing development work shall stop and the area shall be restored. The City shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this Ordinance. Any development carried out contrary to the provisions in this Ordinance shall constitute a public nuisance and pose a risk to the public health, safety, and welfare.

SECTION 6: Chapter 4, Section 4.055 is hereby added to the City of Roseburg's Land Use and Development Ordinance, as amended and provides as follows:

SECTION 4.055 HILLSIDE DEVELOPMENT

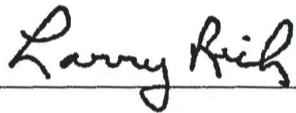
In the case where standards and criteria in Sections 3.35.700 through 3.35.740 Hillside/Geologic Review Area, and in the reference application checklists, of this Ordinance conflict with provisions in this Chapter, development shall conform to Sections 3.35.700

through 3.35.740 and the referenced checklists as determined applicable by the approving authority.

SECTION 7: The City Recorder, at the request of or with the concurrence of the City Attorney, is authorized to administratively correct any reference errors contained herein or in other provisions of the Roseburg Municipal Code and the City's Land Use and Development Ordinance No. 2981 (LUDO) as amended to the provisions added, amended, or repealed herein.

PASSED BY THE COUNCIL THIS 13TH DAY OF AUGUST, 2007.

APPROVED BY THE MAYOR THIS 13TH DAY OF AUGUST, 2007.



Mayor

ATTEST:



City Recorder

Exhibit "A" – Slope Density Map – Appendix B
Exhibit "B" – Geotechnical Report Requirements – A
Exhibit "C" - Geotechnical Report Requirements – A1
Exhibit "D" – Hillside Development Application Checklist – C
Exhibit "E" – Hillside Development Application Checklist – C1
Exhibit "F" – Hillside Development Application Checklist – C2

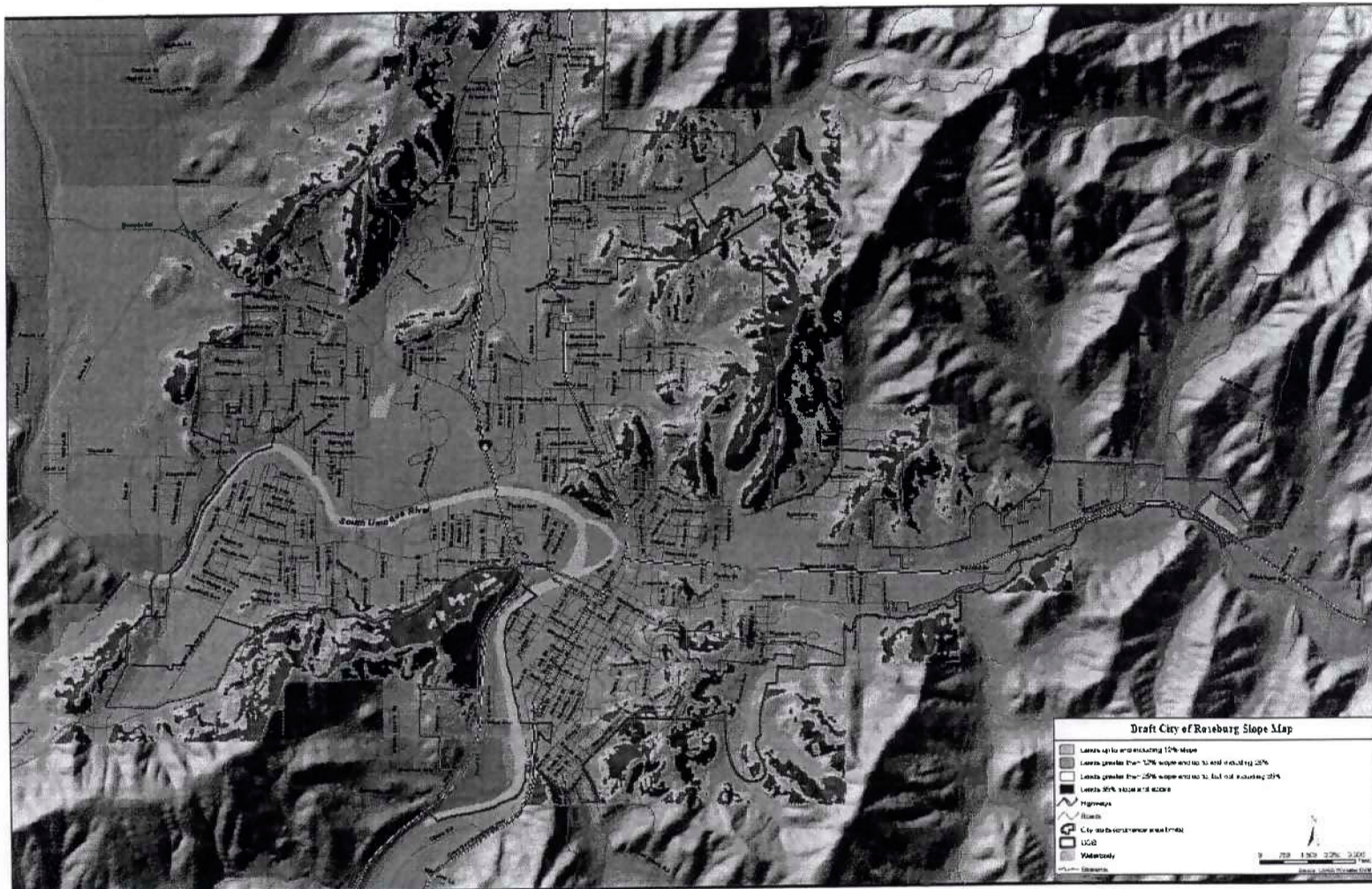


EXHIBIT "A" - Slope Density Map – Appendix B

Exhibit "B"
GEOTECHNICAL REPORT REQUIREMENTS-A

Applicability for lands to be partitioned and/or divided, without ultimate building construction proposed.

A Geotechnical Report, consistent with the information listed below, shall be submitted with the initial application for a land division or Planned Unit Development to develop residential lands having slopes of greater than 12% and as defined by the Ordinance as Hillside Development. The Geotechnical Report is intended to define the subsurface conditions and provide geotechnical conclusions and recommendations for design and construction of the project. A geological assessment or engineering geology report should be incorporated into or included as an appendix to the geotechnical report for the purpose of providing geologic information for the geotechnical engineer, and explaining the implications of the subsurface conditions for appropriate project design and construction. The investigation should include the following:

General

- Name, address, and phone number.
- Client for whom the report was prepared.
- A description of the proposed project and its location.
- A site map of the area at a scale of 1":400' or larger. Geologic conditions, topography, and location of proposed structures are to be shown. A copy of published geologic maps shall also be provided.
- A review of the geologic history and history of prior excavation and fills.
- A field reconnaissance of the site and vicinity.
- Discussion of geologic hazards.
- A discussion of the engineering aspects of the site and proposed project. The discussion should address foundation types for proposed structures, retaining systems, grading considerations, stability of cut-slopes and constructed embankments, settlement of the site and adjacent sites due to existing conditions, proposed construction, and proposed surface and subsurface drainage facilities.
- A bibliography of all references used.

Field Investigations

- Planned construction (type of structure and use, and other information such as type of construction and foundation/floor system, number of stories, estimated structural loads as it may be known).
- Scope (date of work done, investigative methods, sampling methods, logs of borings/test pits, elevations of borings/test pits for reference of materials and samples to finished grade or footing elevations; identify real or assume elevations).
- Location of all samples taken, surface and subsurface.
- Groundwater conditions and potential (future natural and artificial seepage effects).
- Cross-sections (one or more appropriately positioned and referenced on map; especially through critical areas, slopes, and slides) of suitable size and engineering scale, with labeled units, features, and structures; and a legend. These cross-sections should correlate with surface and subsurface data showing representative dip components, projections, and stratigraphic/structural relationships.

Engineering/Material Characteristics and Testing

- Test methods used, type or condition of samples, applicable engineering graphics and calculations, results of all tests, and sample locations of all test samples.
- Unified soil classifications of materials.
- Material competency and strength of existing soils/profile:
 - Pertinent engineering geologic attributes (clayey, weak, loose; alignments, fissility, planar boundaries; pervious or water-bearing parts; susceptibility to mass wasting, erosion, piping, or compressibility).
 - Effects and extent of weathering (existing and relationship to project design and future site stability, material strength).
 - Field densities of unconsolidated field areas and moisture content.
 - Bearing capacity and/or shear strength of areas affected by future foundation placement (drained or undrained conditions, effective stress or total stress analysis; in-situ or remolded samples must be identified).
 - Consolidation or settlement potential.
 - Expansion potential.
- Maximum density-optimum moisture parameters of proposed fill material.

Stability Features and Conditions

- Adequate mapping, section and description dimensions, and type of existing downslope movement (soil/rock creep, flows, falls, slumps, slides, if any).
- Activity, cause, or contributing factors of downslope movement features.
- Recent erosion, deposition, or flooding features.
- Subsidence/settlement, piping, solution, or other void features or conditions.
- Groundwater and surface drainage characteristics or features:
 - Surface expression (past and present); permeability/porosity of near surface materials.
 - Actual or potential aquifers or conduits, perching situations, barriers, or other controls to percolation and groundwater movement and fluctuations of groundwater levels at the site.

References

In supplemental or grading plan review reports referencing earlier reports, supply copies of those referenced reports or applicable portions as required by the Director.

Conclusions and Recommendations

- Ground preparation (clearing, unsuitable material removal, scarification, and moisturization).
- Fill support:
 - Suitability and precompaction of in-situ materials (describe test results and other pertinent data to be used to determine suitability).
 - Densification and moisturization or dewatering measures (equipment, surcharge, settlement monitoring, if applicable).
- Placement of fill:
 - Material approval (on site, imported).
 - Methods and standards (ASTM standards or approved equivalent).
 - Testing standards and frequency of field density testing by vertical intervals and/or volume of fill.
- Elimination of cut/fill or other different transitions beneath improvements.

- Opinion as to adequacy of site for the proposed development (this opinion should also be summarized in the first part of the report).
- Other pertinent geotechnical information for the safe development of the site.

Certification

- A signature, certificate number, and stamp of a Geotechnical Engineer, registered in 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.
- If a geological assessment or engineering geology report is incorporated into or included as an appendix to the geotechnical report, provide a signature, certification number, and stamp of a Certified Engineering Geologist under the provisions of ORS 672.505 to 672.705.
- Prior to acceptance of the construction a written certification shall be submitted from the register Geotechnical Engineering verifying the recommendations of the Report were carried out during the construction, or that needed changes in design were made based on the recommendation of and in conformance with the required Report.

EXHIBIT "C"
GEOTECHNICAL REPORT REQUIREMENTS – A1

Applicability for building construction on existing lots of record

For existing lots of record, in conjunction with obtaining a building permit for lands having slopes of greater than 12% and defined as Hillside Development, a Geotechnical Report shall be submitted as provided below. In the case where a Geotechnical Report was prepared and accepted in conjunction with the initial development, applicable data provided therein may provide the basis for preparation of this report. The Geotechnical Report is intended to define the subsurface conditions and provide geotechnical conclusions and recommendations for design and construction of the project. A geological assessment or engineering geology report may be incorporated into or included as an appendix to the geotechnical report for the purpose of providing geologic information for the geotechnical engineer, and explaining the implications of the subsurface conditions for appropriate project design and construction. The investigation should include the following:

General

- Name, address, and phone number.
- Client for whom the report was prepared.
- A description of the proposed project and its location.
- A site map of the area at a scale of 1":400' or larger. Geologic conditions, topography, and location of proposed structures are to be shown. A copy of published geologic maps shall also be provided.
- A review of the geologic history and history of prior excavation and fills.
- A field reconnaissance of the site and vicinity.
- Discussion of geologic hazards.
- A discussion of the engineering aspects of the site and proposed project. The discussion should address foundation types for proposed structures, retaining systems, grading considerations, stability of cut-slopes and constructed embankments, settlement of the site and adjacent sites due to existing conditions, proposed construction, and proposed surface and subsurface drainage facilities.
- A bibliography of all references used.

Field Investigations

- Planned construction (type of structure and use, type of construction and foundation/floor system, number of stories, estimated structural loads).
- Scope (date of work done, investigative methods, sampling methods, logs of borings/test pits, elevations of borings/test pits for reference of materials and samples to finished grade or footing elevations; identify real or assume elevations).
- Location of all samples taken, surface and subsurface.
- Groundwater conditions and potential (future natural and artificial seepage effects).
- Structural cross-sections (one or more appropriately positioned and referenced on map; especially through critical areas, slopes, and slides) of suitable size and engineering scale, with labeled units, features, and structures; and a legend. These cross-sections should correlate with surface and subsurface data showing representative dip components, projections, and stratigraphic/structural relationships.

Engineering/Material Characteristics and Testing

- Test methods used, type or condition of samples, applicable engineering graphics and calculations, results of all tests, and sample locations of all test samples.
- Unified soil classifications of materials.
- Material competency and strength of existing soils/profile:
 - Pertinent engineering geologic attributes (clayey, weak, loose; alignments, fissility, planar boundaries; pervious or water-bearing parts; susceptibility to mass wasting, erosion, piping, or compressibility).
 - Effects and extent of weathering (existing and relationship to project design and future site stability, material strength).
 - Field densities of unconsolidated field areas and moisture content.
 - Bearing capacity and/or shear strength of areas affected by future foundation placement (drained or undrained conditions, effective stress or total stress analysis; in-situ or remolded samples must be identified).
 - Consolidation or settlement potential.
 - Expansion potential.
- Maximum density-optimum moisture parameters of proposed fill material.

Stability Features and Conditions

- Adequate mapping, section and description dimensions, and type of existing downslope movement (soil/rock creep, flows, falls, slumps, slides, if any).
- Activity, cause, or contributing factors of downslope movement features.
- Recent erosion, deposition, or flooding features.
- Subsidence/settlement, piping, solution, or other void features or conditions.
- Groundwater and surface drainage characteristics or features:
 - Surface expression (past and present); permeability/porosity of near surface materials.
 - Actual or potential aquifers or conduits, perching situations, barriers, or other controls to percolation and groundwater movement and fluctuations of groundwater levels at the site.

Foundation Design Criteria

- *Footing depth and width.*
- *Criteria for foundation material preparation.*
- *Allowable bearing values based on testing.*
- *Lateral pressures (active, passive, or at-rest conditions) and coefficient of friction.*
- *Settlement - total, differential, and rate of settlement.*

References

In supplemental or grading plan review reports referencing earlier reports, supply copies of those referenced reports or applicable portions as required by the Director.

Conclusions and Recommendations

- Ground preparation (clearing, unsuitable material removal, scarification, and moisturization).
- Fill support:
 - Suitability and precompaction of in-situ materials (describe test results and other pertinent data to be used to determine suitability).

- Densification and moisturization or dewatering measures (equipment, surcharge, settlement monitoring, if applicable).
- Placement of fill:
 - Material approval (on site, imported).
 - Methods and standards (ASTM standards or approved equivalent).
 - Testing standards and frequency of field density testing by vertical intervals and/or volume of fill.
- Elimination of cut/fill or other different transitions beneath improvements.
- Opinion as to adequacy of site for the proposed development (this opinion should also be summarized in the first part of the report).
- Other pertinent geotechnical information for the safe development of the site.

Certification

- A signature, certificate number, and stamp of a Geotechnical Engineer, registered in 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.
- If a geological assessment or engineering geology report is incorporated into or included as an appendix to the geotechnical report, provide a signature, certification number, and stamp of a Certified Engineering Geologist under the provisions of ORS 672.505 to 672.705.
- Prior to acceptance of the construction a written certification shall be submitted from the register Geotechnical Engineering verifying the recommendations of the Report were carried out during the construction, or that needed changes in design were made based on the recommendation of and in conformance with the required Report.

EXHIBIT "D"
HILLSIDE DEVELOPMENT APPLICATION CHECKLIST - C

Applicability for lands to be partitioned and/or divided, without ultimate building construction proposed.

Submittal Requirements. In addition to submittal requirements for a land division or Planned Unit Development applications on lands having slopes of greater than 12%, the following information is required for a complete application.

All plans below shall be fully dimensioned, drawn to scale, and display a north arrow. **Five (5) sets of full sized plans** (24" x 36") and **one (1) set of reduced plans** (11" x 17") are required for all applications. All **plans shall be folded** to 8-1/2" x 11" (approximately) and submitted **in collated sets**.

- **APPLICATION FORM.** Available from the City of Roseburg Community Development Department. Include contact information and signature(s) of legal property owner(s) and applicant, property location, parcel number, legal description, project type, zoning classification, parcel size, and additional permits.
- **FEES.** Contact City of Roseburg Community Development Department for applicable Fees and Charges.
- **TITLE REPORT.** Prepared within the past six months (two copies).
- **WRITTEN STATEMENT.** A general describe of the existing and post-project appearance of the site as seen from adjoining parcels located level with or above the lowest elevation of the site, public open spaces, parks, rights-of-way, and other public places.
- **VICINITY MAP.** Vicinity map showing major cross streets, north arrow, and graphic scale.
- **SLOPE MAP.** Plans showing existing slopes (separate contrasting colors shall be used to show slope categories) based on the following slope categories: 0% to 12%, greater than 12% to 25%, greater than 25% to 35%, and greater than 35%.
- **SLOPE CALCULATION.** Average slope calculation data including a completed worksheet form (worksheet available from Community Development).
- **SLOPE DENSITY CALCULATION.** Slope density calculations are only required for density transfer. Average slope density calculation data shall include a completed worksheet form (work sheet available from Community Development).
- **SITE PLAN.** Plan shall be drawn at 1 in. = 20 ft. or larger scale and shall include the following:
 - a. Exterior boundaries of property indicating dimensions of property lines, easements, and lot area in square feet.

- b. Location, dimension, and proposed easements (i.e., water, sewer, access, etc.).
 - c. Plans shall indicate the existing and proposed contours of the site at two-foot maximum intervals.
 - d. Adjacent streets indicating street name and street width, centerline and edge of right-of-way along with any proposed right-of-way dedication, and existing improvements such as curb, gutter, sidewalk, driveway, median, and landscape strips.
 - e. Preliminary drainage information showing spot elevations, pad elevations, existing catch basins, and direction of proposed drainage.
- **DEVELOPMENT PLAN.** Location and dimensions of all proposed street light fixtures, utility boxes and meters, transformers, freestanding signs, mailboxes, directories, and other accessory structures. Location and dimensions of existing driveways, public parking areas, roadways, backup loading facilities, circulation patterns and utility lines shall also be shown.
 - **DEMOLITION PLAN.** Plan identifying all structures to be demolished.
 - **STORM WATER PLAN.** Plan shall be consistent with requirements in the City of Roseburg's Storm Water Management Design Standards.
 - **VEGETATION REMOVAL PLAN.** On areas have a slope of greater than 12% and prior to removal of any vegetation, plans shall show the location, species, and size of vegetation to be removed, along with data that identifies slope stability with and without such planting.
 - **PLANTING/RE-VEGETATION PLAN.** Plan showing location, species, size, and proposed maintenance of proposed re-vegetation.
 - **GRADING PLAN.** Preliminary grading plan shall be consistent with requirements in the latest version of the International Building Code, as amended by State of Oregon, and at a minimum such plans shall:
 - a. Estimate quantities of excavation and fill.
 - b. Show the existing grade and finished grade in contour intervals of sufficient clarity.
 - c. Show existing grade on adjoining properties in sufficient detail.
 - d. Show areas of excavation, fill, and scarification.
 - e. Provide for compaction testing program.
 - f. Provide for special inspection if required.
 - **EROSION AND SEDIMENT CONTROL PLAN.** Plan shall be consistent with requirements in the DEQ Construction Storm Water Permit Guidance 1200-C NPDES General Permit and as specified for Hillside/Geologic Review Areas.
 - **PROPERTY SLOPE PROFILE.** Plans shall show elevations at each property providing including data relative to the drive access for each proposed lot.
 - **CROSS SECTIONS.** A minimum of two cross sections through critical portions of the

project extending beyond the property line to the curb line of adjacent street or to a minimum of 150 ft. onto adjacent properties, indicating existing topography and grades. Sections shall be drawn to scale, with the same scale used for both vertical and horizontal axis.

- **PHOTOGRAPHS OR PHOTOMONTAGES.** Several photographs of the project site and adjacent development. Photographs of the project site as viewed from public open spaces, parks, rights-of-way, and other public places. It is helpful to produce a panorama or streetscape of the site and surrounding properties by joining several photos. Staff may request photomontages if determined necessary. A key map shall be provided showing where each photo is taken from.
- **SIGNIFICANT FEATURES.** Location of significant historic, cultural, archaeological, and natural features of the site including: geologic hazard areas, ridgelines, bluffs, rock formations, vegetation, and natural streams/drainage ways. Location, size, and species of all heritage trees (trees over 72 in. in circumference measured 4-1/2 feet above natural grade, multi-stemmed trees with one stem of at least 24 inches in circumference), and any group of trees which has a relationship to an event of historical significance or is of public interest, and other natural attributes such as creeks, wetlands, ponds, etc., extending 50 ft. or more beyond the property to show relationship of proposed development with adjacent properties. If heritage trees are present an arborist report may be determined necessary. For development of one single-family unit on an existing lot of record, location of significant features not required.
- **REQUIRED REPORTS.** A Geotechnical Report is required for any development that includes lands with slopes greater than 12%. Geotechnical Report requirements are listed in Appendix A of this ordinance.

EXHIBIT "E"
HILLSIDE DEVELOPMENT BUILDING APPLICATION CHECKLIST – C1

Submittal Requirements. The following information is required for a complete application for residential construction in the Hillside/Geologic Review Area. Please review this checklist with Community Development Department staff to confirm specific requirements and determine if other applications are required.

All plans below shall be fully dimensioned, drawn to scale, and display a north arrow. **Five (5) sets of full sized plans (24" x 36")** are required for all applications. All **plans shall be folded to 8-1/2" x 11"** (approximately) and submitted **in collated sets. One full-sized rendered copy of the site plan, building elevations and preliminary landscape plan shall also be submitted.**

- **APPLICATION FORM.** Available from the City of Roseburg Community Development Department. Include contact information and signature(s) of legal property owner(s) and applicant, property location, parcel number, legal description, project type, zoning classification, parcel size, lot coverage/floor area calculations, and additional permits.
- **FEES.** Contact City of Roseburg Community Development Department for applicable Fees and Charges.
- **WRITTEN STATEMENT.** A general describe of the existing and post-project appearance of the site as seen from adjoining parcels, public open spaces, parks, rights-of-way, and other public places.
- **VICINITY MAP.** Vicinity map showing major cross streets, north arrow, and graphic scale.
- **SLOPE MAP.** Plans showing existing and final slope (separated by contrasting colors), based on the following slope categories: 0% to 12%, greater than 12% to 25%, greater than 25% to 35%, and greater than 35%.
- **SITE PLAN.** Plan shall be drawn at 1 in. = 20 ft. or larger scale and shall include the following:
 - a. Exterior boundaries of property indicating dimensions of property lines, easements, and lot area in square feet.
 - b. Indication of building envelope approved with the initial development plans, including elevations, length, width, and height dimensions.
 - c. Plans shall indicate the existing and proposed contours of the site at two-foot maximum intervals.
 - d. Location and dimensions of all existing structures including roof overhangs, pop-outs, projections and other architectural features, decks, porches, fences, walls, trash enclosures, light fixtures, utility boxes and meters, transformers, freestanding signs, mailboxes, directories, and other accessory structures.
 - e. Location and dimensions of existing driveways, parking areas, roadways, and utility lines.
 - f. Location, dimension of all easements existing and proposed (i.e., water, sewer,

- access, etc.).
 - g. Adjacent streets indicating street name and street width, centerline and edge of right-of-way.
 - h. Location and dimensions of parking spaces and backup loading facilities, and circulation patterns.
 - i. Provide tabulation of building floor area, parking ratios with number of parking spaces proposed and required.
 - (1) Floor area in square feet for all buildings. For residential developments, include the floor area for each unit and the number of units by type.
 - (2) Preliminary drainage information showing spot elevations, pad elevations, existing catch basins, and direction of proposed drainage.
- **ESTABLISHED BUILDING ELEVATIONS.** Plans shall be drawn at 1/8 in. = 1 ft. or larger scale and shall include the following for all four sides of buildings as it relates to the approved building envelope, along with elevations of all existing structures to remain.
 - a. Dimensions of all buildings and components (height, width, roof height, overhang, etc).
 - b. Details including materials and dimensions of door and window treatments, railings, stairways, handicap ramps, trim, fascia, soffits, columns, fences, and other elements, which affect the building. Provide sections to clarify detailing as appropriate.
 - c. Details of vents, gutters, downspouts, scuppers, external air conditioning equipment, etc.
 - d. Location and type of fixed exterior lighting.
 - e. Location and height of rooftop mechanical equipment, with hidden line for equipment and top of roof on elevations or section detail of screen structure.
 - f. Details and dimensions of transformers, utility boxes and meters, utility poles, and mailboxes (show location and approximate size).
- **DEMOLITION PLAN.** Plan identifying all structures to be demolished.
- **STORM WATER PLAN.** Plan shall be consistent with requirements in the City of Roseburg's Storm Water Management Design Standards.
- **GRADING PLAN.** Grading plan shall be consistent with requirements in the latest version of the International Building Code, as amended by State of Oregon, and at a minimum such plans shall:
 - a. Estimate quantities of excavation and fill.
 - b. Show the existing grade and finished grade in contour intervals of sufficient clarity.
 - c. Show existing grade on adjoining properties in sufficient detail.
 - d. Show areas of excavation, fill, and scarification.
 - e. Provide for compaction testing program.
 - g. Provide for special inspection if required.

- **EROSION AND SEDIMENT CONTROL PLAN.** Plan shall be consistent with requirements in the DEQ Construction Storm Water Permit Guidance 1200-C NPDES General Permit.
- **PROPERTY SLOPE PROFILE.** Plans shall show elevations at each property providing including data relative to the drive access for each proposed lot.
- **SIGNIFICANT FEATURES.** Location of significant historic, cultural, archaeological, and natural features of the site including: geologic hazard areas, ridgelines, bluffs, rock formations, vegetation, and natural streams/drainage ways. Location, size, and species of all heritage trees (trees over 72 in. in circumference measured 4-1/2 feet above natural grade, multi-stemmed trees with one stem of at least 24 inches in circumference), and any group of trees which has a relationship to an event of historical significance or is of public interest, and other natural attributes such as creeks, wetlands, ponds, etc., extending 50 ft. or more beyond the property to show relationship of proposed development with adjacent properties. If heritage trees are present an arborist report may be determined necessary. For development of one single-family unit on an existing lot of record, location of significant features not required.

REQUIRED REPORTS. A Geotechnical Report is required for any construction on slopes greater than 12%. Geotechnical Report requirements are listed in Appendix A1 of this ordinance.

EXHIBIT "F"
HILLSIDE DEVELOPMENT BUILDING SUBMITTAL CHECKLIST – C2

Applicability for building construction on lands partitioned and/or divided prior to the adoption of the Hillside Development Ordinance. (Existing lots of records)

Submittal Requirements. In the case where a single family dwelling is proposed to be developed on a lot established prior to the adoption of the Hillside Development Ordinance, or for which a Geotechnical Report has not been prepared, and construction will include areas of greater than 12% slope, the following information is required for a complete application for residential construction in the Hillside/Geologic Review Area. Please review this checklist with Community Development Department staff to confirm specific requirements and determine if other applications are required.

All plans below shall be fully dimensioned, drawn to scale, and display a north arrow. **Five (5) sets of full sized plans** (24" x 36") are required for all applications. All **plans shall be folded** to 8-1/2" x 11" (approximately) and submitted **in collated sets**.

- **APPLICATION.** Plans shall be in conformance with the requirements for Site Plan Review proposed in Section 2.3.075.12 and shall include contact information and signature(s) of legal property owner(s) and applicant, property location, parcel number, legal description, project type, zoning classification, parcel size.
- **FEES.** Contact City of Roseburg Community Development Department for applicable Fees and Charges.
- **VICINITY MAP.** Vicinity map showing major cross streets, north arrow, and graphic scale.
- **DEVELOPMENT PLAN.** Location and dimensions of all proposed structures, including roof overhangs, pop-outs, projections and other architectural features, decks, porches, fences, walls, trash enclosures, light fixtures, utility boxes and meters, transformers, freestanding signs, mailboxes, directories and other accessory structures. Location and dimensions of proposed driveways, parking areas, roadways, and utility lines shall also be shown.
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- **DEMOLITION PLAN.** Plan identifying all structures to be demolished.
- **STORM WATER PLAN.** Plan shall be consistent with requirements in the City of Roseburg's Storm Water Management Design Standards. Preliminary drainage information showing spot elevations, pad elevations, existing catch basins, and direction of proposed drainage shall be provided.
- **GRADING PLAN.** Preliminary grading plan shall be consistent with requirements in the latest version of the International Building Code, as amended by State of Oregon, and at a minimum such plans shall:
 - a. Estimate quantities of excavation and fill.
 - b. Show the existing grade and finished grade in contour intervals of sufficient clarity.

- c. Show existing grade on adjoining properties in sufficient detail.
 - d. Show areas of excavation, fill, and scarification.
 - e. Provide for compaction testing program.
 - f. Provide for special inspection if required.
- **EROSION AND SEDIMENT CONTROL PLAN.** Plan shall be consistent with requirements in the DEQ Construction Storm Water Permit Guidance 1200-C NPDES General Permit as specified for properties located in the Hillside/Geologic Review Area.
 - **PROPERTY SLOPE PROFILE.** Plans shall show elevations at each property providing including data relative to the drive access for each proposed lot.
 - **SIGNIFICANT FEATURES.** Location of significant historic, cultural, archaeological, and natural features of the site including geologic hazard areas, ridgelines, bluffs, rock formations, vegetation, and natural streams/drainage ways. Location, size, and species of all heritage trees (trees over 72 in. in circumference measured 4-1/2 feet above natural grade, multi-stemmed trees with one stem of at least 24 inches in circumference), and any group of trees which has a relationship to an event of historical significance or is of public interest, and other natural attributes such as creeks, wetlands, ponds, etc., extending 50 ft. or more beyond the property to show relationship of proposed development with adjacent properties. If heritage trees are present an arborist report may be determined necessary. For development of one single-family unit on an existing lot of record, location of significant features not required.
 - **REQUIRED REPORTS.** A Geotechnical Report is required for any construction on slopes greater than 12%. Geotechnical Report requirements are listed in Appendix A1 of this ordinance.