



- 1 4. A new Section 5.600 is created and entitled "Erosion Control and Water Quality
- 2 Standards" as shown in Exhibit IV.
- 3 5. Section 1.040 is amended as shown in Exhibit V.
- 4 6. Sections 1.060 and 1.070 are renumbered as shown in Exhibit V.
- 5 7. A new section 1.060 is created and entitled "Erosion Control and Water Quality
- 6 Definitions" as shown in Exhibit V.
- 7 8. All sections are renumbered as appropriate.
- 8 9. The map titled "City of Troutdale Slope Map" dated April 1994 is adopted.
- 9 10. The map titled "City of Troutdale Flood Plain and Stream Corridor" dated April 1994
- 10 is adopted.
- 11 11. Findings of Fact (attached as Exhibit A) are adopted as part of this ordinance.

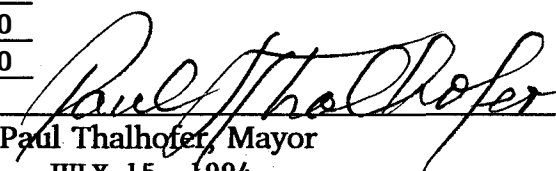
12 PASSED BY THE COMMON COUNCIL OF THE CITY OF TROUTDALE THIS 12TH DAY OF

13 JULY, 1994.

14 YEA: 6

15 NAYS: 0


16 ABSTAINED: 0

17 

18 Paul Thalhofer, Mayor

19 Dated: JULY 15, 1994

20 ATTEST:

21 

22 George Martinez

23 Deputy City Recorder

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- 1        1.040        Flood Hazard and Hillside Overlay District Definitions
- 2                    .02    Appeal. A request for a review of the Director's interpreta-  
3                    tion of any provision of this ordinance or request for a  
4                    variance from requirements of Chapter 4 - Flood Hazard.
- 5                    .04    Area of Shallow Flooding. A designated AO or AH zone  
6                    on the Flood Insurance Rate Map (FIRM). The base flood  
7                    depths range from one to three feet; a clearly defined  
8                    channel does not exist; the path of flooding is unpredict-  
9                    able and indeterminate; and, velocity flow may be  
10                    evident. AO is characterized as sheet flow and AH  
11                    indicates ponding.
- 12                    .05    Floodplain or flood-prone area. Any land area susceptible  
13                    to being inundated by water from any source.
- 14                    .06    Area of Special Flood Hazard (100 Year Flood Plain). The  
15                    land in the flood plain within a community subject to a  
16                    one percent or greater chance of flooding in any given  
17                    year. Designation on maps always includes the letters A  
18                    or V.
- 19                    .07    Base Condition. Condition of property at time of  
20                    adoption of this ordinance.
- 21                    .08    Base Flood. The flood having a one percent chance of  
22                    being equaled or exceeded in any given year. Also  
23                    referred to as the "100-year" flood. Designation on maps  
24                    always includes the letter A or V.
- 25                    .09    Conservation Easement. An easement applied to  
26                    environmentally sensitive lands which prohibits most  
27                    forms of development, and which assures that native  
28                    vegetation will be maintained or enhanced. Conservation  
29                    easements usually affect privately owned land, and are  
30                    enforceable by the City of Troutdale. Trails and limited  
31                    public facilities may be permitted under carefully

1 controlled conditions within conservation easements.

2 10. Development. Any artificial change to improved or unim-  
3 proved real estate, including but not limited to, buildings  
4 or other structures, mining, dredging, filling, grading,  
5 paving, excavation, vegetation removal, drilling, stream  
6 alteration or channeling, or other activities that  
7 adversely affect flood hazard potential or water quality  
8 within the area of special flood hazard.

9 11. Escarpment. A steep slope (25% or greater) separating  
10 a gently sloping surface (less than 10 percent slope)  
11 from a stream or river channel, and resulting from water  
12 and/or wind erosion. The "top of the escarpment" is land  
13 immediately above the line where the slope breaks  
14 downward to a creek or river.

15 .12 Flood or Flooding. A general and temporary condition of  
16 partial or complete inundation of normally dry land areas  
17 from:

18 (a) The overflow of inland or tidal waters and/or

19 (b) The unusual and rapid accumulation of runoff of  
20 surface waters from any source.  
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22 .14 Flood Insurance Rate Map (FIRM). The official map on  
23 which the Federal Insurance Administration has delineat-  
24 ed both the areas of special flood hazards and the risk  
25 premium zones applicable to the community.  
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27 .16 Flood Insurance Study. The official report provided by  
28 the Federal Insurance Administration that includes flood  
29 profiles, the Flood Boundary-Floodway Map, and the  
30 water surface elevation of the base flood.

31 .18 Floodway. The channel of a river or other water-course  
32 and the adjacent land areas that must be reserved in

- 1 order to discharge the base flood without cumulatively  
2 increasing the water surface elevation more than one  
3 foot.
- 4 .20 Lowest Floor. The lowest floor of the lowest enclosed  
5 area (including basement). An unfinished or flood  
6 resistant enclosure, usable solely for parking of vehicles,  
7 building access or storage, in an area other than a  
8 basement area, is not considered a building's lowest  
9 floor, provided that such enclosure is not built so as to  
10 render the structure in violation of the applicable non-  
11 elevation design requirements of the Flood Hazard  
12 regulations.
- 13 .22 Manufactured Home. A structure, transportable in one or  
14 more sections, which is built on a permanent chassis and  
15 is designed for use with or without a permanent founda-  
16 tion when connected to the required utilities. For flood  
17 plain management purposes the term "manufactured  
18 home" also includes park trailers, travel trailers, and area  
19 of special flood hazard.
- 20 .24 Manufactured Home Park or Subdivision. A parcel (or  
21 contiguous parcels) of land divided into two or more  
22 manufactured home lots for rent or sale.
- 23 .26 New Construction. Structures for which the "start of  
24 construction" commenced on or after the effective date  
25 of this code.
- 26 .27 Slopes. Steep Slope areas include all areas in the City  
27 where the slope of the land is 25 percent or greater.  
28 Constrained Slope areas include all undeveloped areas  
29 where the slope of the land is from 15 to 24 percent.  
30 Such slopes are depicted generally on the City of  
31 Troutdale "Slopes Map," on file in the Community  
32 Development Department.

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- .28 Start of Construction. Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufacture home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.
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- .29 Stream Bank, Top of. The land area immediately above regularly confining a waterbody, including a stream, river or wetland. The bank has a notably steeper slope than the surrounding landscape. The top of the bank is the first major break in the slope between the toe of the bank at waterline and the surrounding landscape. The top of the bank does not include the entire canyon created by a stream or river, nor does it usually include the entire drainage area of a wetland. The top of the stream bank, as well as the location of the 100-year floodplain and floodway (if known), are depicted generally on the "City of Troutdale Flood Plain and Stream Corridor Map," on file in the Community Development Department.
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- .30 Structure. A structure is that which is built or constructed, an edifice or building of any kind, or any piece of work articially built up or composed of parts

1 joined together in some definite manner. In addition to  
2 buildings, the definition of "structure" includes such  
3 artificial constructs as parking lots, fences, roads,  
4 utilities and storage tanks.

5 .32 Substantial Improvement. Any repair, reconstruction, or  
6 improvement of a structure, the cost of which equals or  
7 exceeds 50 percent of the market value of the structure  
8 either:

9 (a) before the improvement or repair is started, or

10 (b) if the structure has been damaged and is being  
11 restored, before the damage occurred. For the  
12 purpose of this definition "substantial improve-  
13 ment" is considered to occur when the first alter-  
14 ation of any wall, ceiling, floor or other structural  
15 part of the building commences, whether or not  
16 that alteration affects the external dimensions of  
17 the structure.

18 The term does not, however, include either:

19 (c) any project for improvement of a structure to  
20 comply with existing state or local health, sanitary,  
21 or safety code specifications which are solely  
22 necessary to assure safe living conditions, or

23 (d) any alteration of a structure listed on the National  
24 Register of Historic Places or a State Inventory of  
25 Historic Places.

26 .34 Variance. A grant of relief from the requirements of  
27 Chapter 4-Flood Hazard which permits construction in a  
28 manner that would otherwise be prohibited by the  
29 standards of the FH District.

30 .36 Vegetation, Approved. Vegetation which typically does

1 not require irrigation or fertilization, because it is adapted  
2 to natural soil, water and climatic conditions. The list of  
3 approved vegetation species is based on the "Portland  
4 Plant List' (May 26, 1993) and is on file in the  
5 Community Development Department. In contrast,  
6 invasive and nuisance vegetation can crowd out  
7 approved vegetation species or can be harmful to  
8 humans and animals.

9 1.060 Erosion Control and Water Quality Definitions

- 10 02. Excavation. Any act by which soil or rock is cut into,  
11 dug, quarried, uncovered, removed, displaced or  
12 relocated.
- 13 04. Developer. The owners of property or their agents or  
14 contractors, or their successors and assigns, who have  
15 undertaken or are proposing development which is  
16 regulated by Section 5.600.
- 17 06. Development. See Section 1.020.40.
- 18 08. Erosion. Detachment and movement of soil, rock  
19 fragments, refuse, or any other material, organic or  
20 inorganic.
- 21 10. Fill. Placement of any soil, sand, gravel, clay, mud,  
22 debris, refuse, or any other material, organic or  
23 inorganic.
- 24 12. Mulch. Application of plant residue, netting, plastic  
25 sheeting or other suitable materials to the land surface  
26 to conserve moisture, hold soil in place and aid in  
27 establishing plant cover.
- 28 14. Site. The "site" means the lot, or contiguous lots under  
29 the same ownership, that are subject to a development  
30 permit or erosion control plan.



- 1 16. Sediment. Any material that is in suspension, is being  
2 transported, or has been moved from its site of origin by  
3 water, wind, or gravity as a result of erosion.
- 4 18. Stockpile. On-site storage of any soil, sand, gravel, clay,  
5 mud, debris, vegetation, refuse or any other material,  
6 organic or inorganic, in a concentrated state.
- 7 20. Surface Water Management System. All natural and  
8 constructed facilities used to regulate the quantity and  
9 quality of surface water, including drainage easements,  
10 culverts, storm drains, catch basins, drainage ditches,  
11 natural drainageways, stream corridors, rivers, ponds,  
12 wetlands and impoundments.
- 13 22. Wetland. Wetlands generally include, but are not limited  
14 to, swamps, marshes, bogs, and similar wet areas.  
15 Wetlands are those areas that are inundated or saturated  
16 by surface or ground water at a frequency and duration  
17 sufficient to support, and that under normal conditions  
18 do support, a prevalence of vegetation typically adapted  
19 for life in saturated soil conditions. (ORS 196.800)

20 1.070 Scope and Compliance

21 A parcel of land may be used, developed by land division or  
22 otherwise, and a structure may be used or developed by con-  
23 struction, reconstruction, alteration, occupancy or otherwise  
24 only as permitted by this code. The requirements of this code  
25 apply to the person undertaking a development or the user of  
26 a development and to the person's successors in interest.

27 1.080 Consistency with Plan and Laws

28 Actions initiated under this code shall be consistent with the  
29 adopted Comprehensive Plan of the City of Troutdale and with  
30 applicable state and federal laws and regulations as these  
31 plans, laws and regulations may now or hereafter provide.

1 4.300 HILLSIDE AND EROSION CONTROL OVERLAY DISTRICT

2 4.310 Purpose. The purpose of this overlay district is to promote the  
3 public health, safety, and general welfare. Provisions under  
4 this section are designed to:

5 A. Restrict or prohibit uses, activities or development which  
6 is damage-prone or damage-inducing to the land or to  
7 water quality;

8 B. Require uses vulnerable to landslides, including public  
9 facilities which serve such uses, to be protected at the  
10 time of initial construction;

11 C. Allow the development of land only for those uses which  
12 are suitable on steep slopes;

13 D. Maintain land and water quality by minimizing erosion  
14 and sedimentation, and by restricting or prohibiting  
15 development, excavation and vegetation removal in  
16 areas with constrained or steep slopes.

17 E. To comply with Statewide Planning Goals 6 (Air, Water  
18 and Land Resources Quality) and 7 (Natural Hazards).

19 4.311 Findings of Fact.

20 A. Hillsides within the City of Troutdale represent the  
21 abrupt and noticeable changes in slope that mark the  
22 edges of the Beaver Creek Canyon, the Sandy River and  
23 Arata Creek.

24 B. Hillsides are environmentally sensitive areas. If they are  
25 not well managed, irreversible damage may occur.

26 C. Development, excavation and vegetation removal on  
27 slopes of 25 percent or greater will cause erosion and

1 stream sedimentation, and may increase the probability  
2 of landslides.

3 D. Unless development, excavation and removal of  
4 vegetation on slopes of from 15 to 24 percent are  
5 carefully managed and regulated, the probability of  
6 erosion, stream sedimentation and landslides will  
7 increase.

8 E. Coverage by native plant species and trees is important  
9 to maintenance of land and water quality, both for the  
10 development site and the City as a whole.

11 F. Fertilizers, pesticides and irrigation contribute to water  
12 pollution. Introduced plant species are more likely to  
13 require fertilizers, pesticides and irrigation than are native  
14 plant species.

15 4.312 Areas of Application. The Hillside and Erosion Control Overlay  
16 District shall apply to land on slopes of 15 percent or greater  
17 or unconstrained slopes within 30 feet of the top of  
18 escarpments associated with rivers or streams. .

19 A. Delineation of Boundaries.

20 The Hillside and Erosion Control Overlay District shall be  
21 mapped generally by the City, and shall consist of Steep  
22 Slope and Constrained Slope areas.

23 1. Steep Slope areas include all areas in the City  
24 where the slope of the land is 25 percent or  
25 greater.

26 2. Constrained slope areas include all areas where the  
27 slope of the land is between 15 and 24 percent.

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3. These areas are associated primarily, but not exclusively, with the Beaver Creek Canyon, the Sandy River, and Arata Creek.
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4. Specific determination of Steep Slope and Constrained Slope areas shall be made at the time of a development proposal by the applicant for alteration or development for the respective properties within the Hillside and Erosion Control Overlay District based on the topographic map and field survey.
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5. Areas subject to the restrictions and prohibitions of this overlay district are indicated on the map entitled "City of Troutdale Slope Map" on file in the Community Development Department.
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- a. Where development, excavation or vegetation removal is proposed for areas with 15 percent or greater slope, an on-the-ground topographical survey shall be prepared for the entire site. The survey shall show trees or tree clusters and 2 foot contours, and shall be provided by the property owner or applicant for development approval.
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- b. Areas with 15 to 24 percent slopes, and areas with 25 percent or greater slopes, shall be specifically indicated on the required survey maps.
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- B. Warning and Disclaimer of Liability.
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- The degree of landslide protection required by this ordinance is considered reasonable for regulatory purposes and is based on common engineering and scientific practices . Landslides may occur on rare occasions in areas outside of the delineated Steep Slope

1 and Constrained Slope boundaries. This Ordinance does  
2 not imply that areas outside the Hillside and Erosion  
3 Control Overlay District boundaries or land use  
4 permitted within such boundaries will be free from  
5 significant mass movement or landslide damage. This  
6 Section shall not create City liability for damage  
7 resulting from reliance on the provisions of this Section  
8 or any administrative decision lawfully made thereunder.

9 4.313 Permitted Uses.

10 A. Uses Permitted - Steep Slope (25% or greater) or  
11 unconstrained slopes within 30 feet of the top of  
12 escarpments associated with rivers or streams.

13 1. Open space and trails as designated by the "Parks  
14 Plan," provided they are constructed consistent  
15 with standards on file in the Community  
16 Development Department.

17 2. Removal of refuse and unauthorized fill.

18 3. Removal of nuisance or invasive plant species, or  
19 planting of approved vegetation species on the  
20 Portland Plant List kept on file at the Community  
21 Development Department.

22 4. Removal of dead or dying trees that are an  
23 imminent danger to public safety as determined by  
24 the Director.

25 5. Construction of roads and public utilities necessary  
26 to support permitted development on slopes of 15  
27 percent or less, subject to construction standards  
28 on file in the Public Works Department.

29 6. Expansion of existing roadways and public utility  
30 facilities.

1 B. Prohibited uses on slopes of 25 percent or greater,  
2 unless specifically permitted under Section 4.314:

3 1. Man-made structures.

4 2. Vegetation removal.

5 3. Road construction.

6 4. Excavation.

7 C. Uses Permitted - Constrained Slope (15 to 24 percent).

8 1. Open space.

9 2. At a reduced density and intensity, any use in the  
10 underlying district provided the standards of  
11 Section 4.314 are met.

12 3. Removal of nuisance or invasive plant species, or  
13 planting of approved vegetation species on the  
14 Portland Plant List and kept on file at the  
15 Community Development Department.

16 4.314 Hillside Development Standards.

17 A. Standards.

18 1. The property shall front on a publicly dedicated  
19 street or roadway with a right-of-way width and  
20 street improvement standard acceptable to the  
21 City. The parcel can be adequately served by  
22 municipal water supply and sanitary sewer  
23 systems . Development of individual sewage  
24 disposal systems shall not be permitted within the  
25 Hillside and Erosion Control Overlay District.

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2. Where slopes are 25 percent or greater, or on unconstrained land within 30 feet of the top of escarpments associated with rivers or streams, grading, approved vegetation removal, site preparation and construction shall be prohibited, except where necessary to provide access or utilities to buildable lots with slopes of 15 percent or less.

a. Land with slopes of 25 percent or greater shall be conserved and maintained as open space. This may occur through private ownership, through private conditions, covenants and restrictions, through conservation easements enforceable by the City or other public or private nonprofit agency, or where approved by the City Council, dedication to the City or donation to other appropriate public or private nonprofit agency.

b. Disturbed areas shall be replanted in approved vegetation and tree cover.

3. Where development is proposed on slopes of 15 percent or greater:

a. The impervious surface area of any residential lot or commercial or industrial site (including driveways, sidewalks, structures, swimming pools, and any other area not covered by vegetation) shall not exceed 30 percent of the constrained (15%-24%) slope area;

b. Development shall not result in cuts or fills in excess of three (3) feet except for basement

1 construction unless specifically approved by  
2 the Director.

3 c. At least half the constrained slope area shall  
4 remain in, or be planted in, approved  
5 vegetation. The existing tree canopy shall be  
6 retained wherever possible, and shall be  
7 considered in meeting this standard.

8 d. If development is proposed on constrained or  
9 steep slope areas, a mitigation plan for  
10 disturbed areas on constrained or steep slope  
11 areas shall be prepared and implemented.  
12 This plan shall provide for the replanting and  
13 maintenance of approved plant species  
14 designed to achieve pre-disturbance  
15 conditions.

16 4. The applicant's engineering plans shall certify that  
17 runoff and sedimentation from the site will not  
18 increase more than 10% above conditions present  
19 on the site as of January 1, 1994.

20 5. The applicant's engineer shall provide a  
21 construction erosion control plan and water quality  
22 plan, consistent with the provisions of Section  
23 4.600 and consistent with the City's NPDES  
24 program.

25 B. Submission Requirements. For the purpose of minimizing  
26 landslide hazards, and where development is proposed  
27 on slopes of 15 percent or greater, the Director shall  
28 require submission of the following special reports,  
29 prepared by professionals in their respective fields:

30 1. Hydrology, Geology and Soils Report. This report  
31 shall include information on the hydrological  
32 activities of the site, the effect of hydrologic



1 conditions on the proposed development, and any  
2 hydrological or erosion hazards. This report shall  
3 also include geological characteristics of the site,  
4 its suitability for development, its carrying  
5 capacity, and any geological hazard that might  
6 present a hazard to life and property, or adversely  
7 affect the use or stability of a public facility or  
8 utility. Finally, this report shall include information  
9 on the nature, distribution and strength of existing  
10 soils; the adequacy of the site for development  
11 purposes; and an assessment of grading  
12 procedures required to impose the minimum  
13 disturbance to the natural state. The report shall be  
14 prepared by a professional engineer registered in  
15 Oregon.

16 2. Grading Plan. The grading shall be specific to a  
17 proposed physical structure or use and shall  
18 include information on terrain (two foot contours  
19 ), drainage, direction of drainage flow, location of  
20 proposed structures and existing structures which  
21 may be affected by the proposed grading  
22 operations, water quality facilities, finished  
23 contours or elevations, including all cut and fill  
24 slopes and proposed drainage channels. Project  
25 designs including but not limited to locations of  
26 surface and subsurface devices, walls, dams,  
27 sediment basins, storage reservoirs, and other  
28 protective devices shall form part of the  
29 submission. The grading plan shall also include a  
30 construction phase erosion control plan and a  
31 schedule of operations and shall be prepared by a  
32 professional engineer registered in Oregon.

33 3. Vegetation Report. This report shall consist of a  
34 survey of existing vegetative cover, whether it is  
35 native or introduced, and how it will be altered by  
36 the proposed development. Measures for re-

1 vegetation with approved plant species will be  
2 clearly stated, as well as methods for immediate  
3 and long-term stabilization of slopes and control of  
4 soil erosion. The vegetation report shall be  
5 prepared by a landscape architect, landscape  
6 designer, botanist or arborist with specific  
7 knowledge of native plant species, planting and  
8 maintenance methods, survival rates, and their  
9 ability to control erosion and sedimentation. The  
10 applicant will be responsible for replacing any  
11 native plant species that do not survive the first  
12 two years after planting.

- 13 4. Design Standards. The required reports shall  
14 include design standards necessary for the  
15 engineer and landscape expert to certify that  
16 development on slopes of 15 percent or greater,  
17 when combined with impacts from development of  
18 lesser slopes, will not increase runoff,  
19 sedimentation to affected streams or wetlands,  
20 erosion, or landslide potential more than 10%  
21 above base conditions. These requirements shall be  
22 incorporated as conditions into the final decision  
23 approving the proposed development.

24 C. Residential Density Allowance and Transfer Provisions.

- 25 1. Slopes of between 15 and 24 percent: the  
26 maximum residential density allowed in constrained  
27 slopes areas shall be 70 percent of the density  
28 otherwise permitted in the underlying residential  
29 zoning district. The remaining 30 percent of the  
30 otherwise permitted density may be transferred to  
31 buildable portions of the site (i.e., areas where  
32 slopes are less than 15 percent and outside of the  
33 100-year floodplain).

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2. Slopes of 25 percent or greater: density may be transferred to buildable portions of the site (i.e., where slopes are less than 15 percent and outside the floodplain) at a rate of one unit per steeply-sloped acre.
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3. The net increase in density as a result of density transfer shall not exceed 50% of the base density that would otherwise be allowed on buildable portions of the lot. Single-family residential lot sizes on buildable land may be as small as 5,000 square feet to allow for density transfer.
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4. Exception: Each lot-of-record, that has received planning approval from either Multnomah County or the City of Troutdale, may have one dwelling unit, provided that the siting, engineering, erosion control, water quality and re-vegetation standards of Section 4.314 have been fully satisfied. No new lot shall be approved for development which is exclusively on slopes of 25% percent or greater.

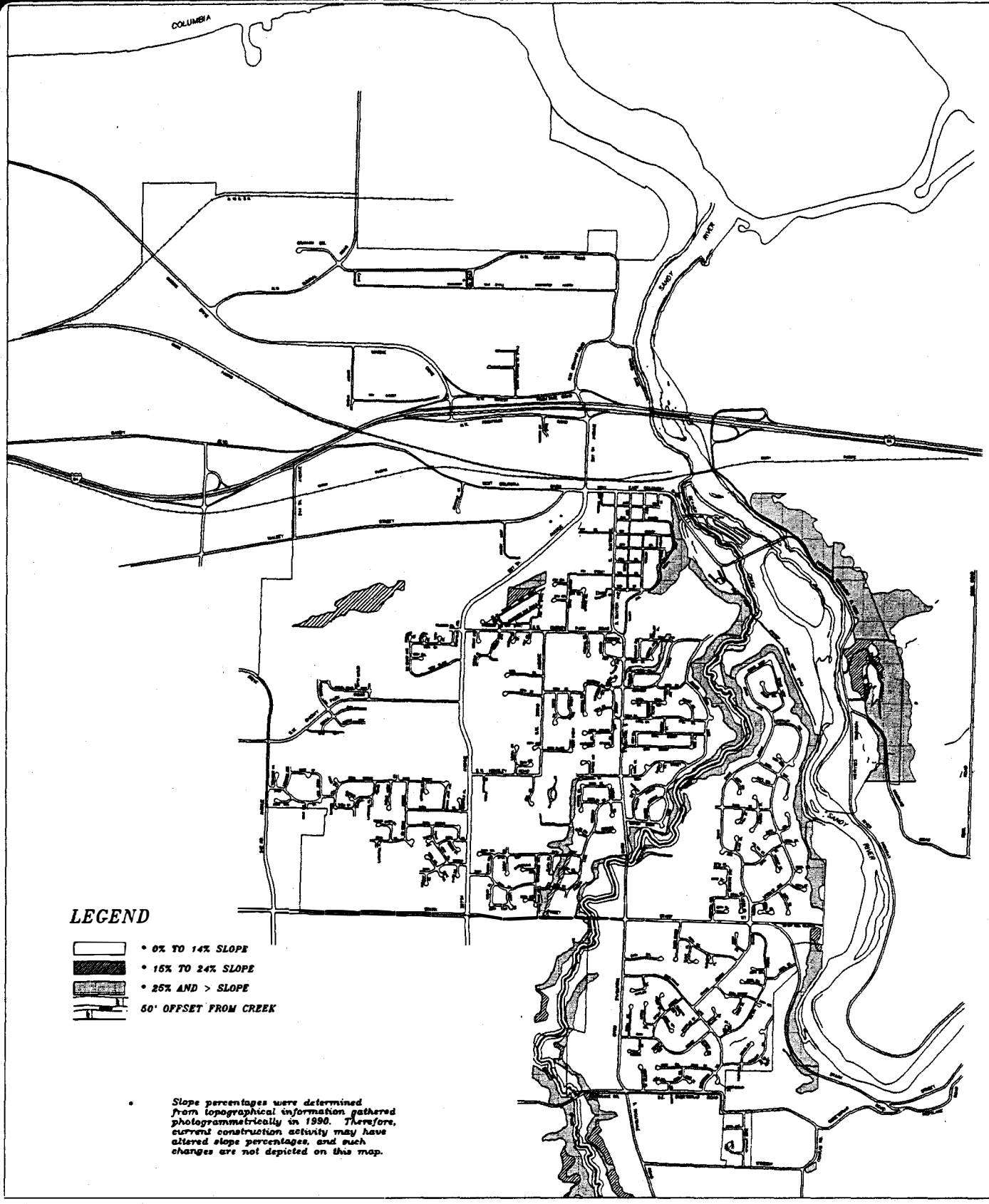
20 4.315 Approval Procedure - Type 1.

- 21 A. The Director shall approve new development for a single-  
22 family or two-family dwelling under the Type 1  
23 procedure within the Hillside and Erosion Control Overlay  
24 District only if the proposed use or structure meets all of  
25 these conditions:
- 26 1. That development standards are met as prescribed  
27 under section 4.314;
- 28 2. That adequate protection is utilized to minimize  
29 landslide and erosion hazards, consistent with  
30 Section 5.600;





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3. That the applicant provides assurances that development impacts will be minimized on slopes greater than 25 percent, provided however, that a property owner shall not be denied the right to construct a single-family home on a residentially zoned, lot-of-record, approved by Multnomah County or the City of Troutdale prior to January 1, 1994.
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4. Notwithstanding the provisions of Section 6.200, Variance, an adjustment of up to 50% from any dimensional standard in the underlying zoning district may be approved under Type 1 procedure, where necessary to avoid construction on slopes of 25 percent or greater or to meet the standards of Section 4.314.
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5. That it is in conformance with the provisions of the Troutdale Development Code .
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- B. The Director shall determine the final boundaries of constrained slope and steep slope areas based on topographical information provided by an engineer or surveyor registered in Oregon. The applicant shall be responsible for submitting such information.
- 23 4.316 Approval Procedure - Type 3. The Planning Commission shall  
24 approve new developments for more than one single-family or  
25 two-family dwelling within the Hillside and Erosion Control  
26 Overlay District under a Type 3 procedure provided that the  
27 proposed use or structure meets all of these conditions:
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- A. That development standards are met as prescribed under Section 4.314;
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- B. That adequate protection is utilized to minimize landslide and erosion hazards, consistent with Section 5.600;

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C. That it is in conformance with the City's Comprehensive Plan, and Troutdale Development Code, provided, however, that policies in the Comprehensive Plan will not be used to discourage needed housing, or to unreasonably increase cost or review time.



**LEGEND**

-  • 0% TO 14% SLOPE
-  • 15% TO 24% SLOPE
-  • 25% AND > SLOPE
-  60' OFFSET FROM CREEK

*Slope percentages were determined from topographical information gathered photogrammetrically in 1980. Therefore, current construction activity may have altered slope percentages, and such changes are not depicted on this map.*

FILE NAME: SLOPE  
 TITLE BLOCK: TBBX11  
 EXTERNAL REFERENCES: TROUTBAS;  
 PLOT DATE: 07-05-94  
 BY: J.M.  
 PREVIOUS REVISION DATE: 06-01-94



DEPARTMENT OF PUBLIC WORKS  
 CITY OF TROUTDALE

**SLOPE MAP**

MULTNOMAH COUNTY, OREGON  
 JULY 1994

1 4.600 FLOOD HAZARD AND WATER QUALITY OVERLAY DISTRICT

2 4.610 Purpose. To promote the public health, safety and general  
3 welfare, and to minimize public and private losses due to flood  
4 conditions or degradation of water quality in specific areas by  
5 provisions designed:

6 A. To protect human life and health;

7  
8 B. To minimize expenditure of public money and costly  
9 flood control projects;

10 C. To minimize the need for rescue and relief efforts  
11 associated with flooding and generally undertaken at the  
12 expense of the general public;

13 D. To minimize prolonged business interruptions;

14  
15 E. To minimize damage to public facilities and utilities such  
16 as water and gas mains, electric, telephone and sewer  
17 lines, streets, and bridges located in areas of special  
18 flood hazard;

19 F. To help maintain a stable tax base by providing for the  
20 sound use and development of areas of special flood  
21 hazard so as to minimize future flood blight areas;

22 G. To ensure that potential buyers are notified that property  
23 is in an area of special flood hazard; and,

24 H. To ensure that those who occupy the areas of special  
25 flood hazard assume responsibility for their actions.

26 I. To maintain and improve water quality.

27 J. To minimize erosion and loss of native vegetative cover.

1 K. To maintain wetlands within floodplain areas, because  
2 wetlands help to maintain water quality and maintain  
3 flood storage capacities.

4 L. To avoid any increase in base flood elevations as a result  
5 of development.

6 4.611 Methods of Reducing Flood Losses and Maintaining Water  
7 Quality.

8 In order to accomplish this purpose, this section includes  
9 methods and provisions for:

10 A. Restricting or prohibiting uses which are dangerous to  
11 health, safety, and property due to water or erosion  
12 hazards, or which result in damaging increases in erosion  
13 or in flood heights or velocities;

14 B. Requiring that uses vulnerable to floods, including  
15 facilities which serve such uses, be protected against  
16 flood damage at the time of initial construction;

17 C. Controlling the alteration of natural flood plains, stream  
18 channels, and natural protective barriers, which help  
19 accommodate or channel flood waters;

20 D. Controlling filling, grading, dredging, and other  
21 development which may increase flood damage; and  
22

23 E. Preventing or regulating the construction of flood barriers  
24 which will unnaturally divert flood waters or may  
25 increase flood hazards in other areas.

26 F. Maintaining and reintroducing approved vegetation,  
27 which minimizes erosion and helps to maintain and  
28 improve water quality.

29 4.612 Applicability.



1 A. This section shall apply to all areas of special flood  
2 hazard and water quality impact, including all areas  
3 within 50 feet of the top of the banks of Arata, Salmon  
4 and Beaver Creeks, and the Sandy River, within the  
5 jurisdiction of the City of Troutdale.

6 B. Delineation of Boundaries.

7 The Flood Hazard and Water Quality Overlay District  
8 shall be mapped generally by the City. However, the  
9 applicant for alteration or development within this  
10 overlay district shall be responsible for precisely defining  
11 the following, based upon site-specific field surveys or  
12 Corps of Engineers data:

- 13 1. 100-year floodplain boundaries.
- 14 2. Floodway boundaries.
- 15 3. The name, location and dimensions of affected  
16 streams or rivers and the tops of their banks.
- 17 4. The area enclosed by a continuous line, located 50  
18 feet from the tops of streams and river banks.

19 4.613 Basis for establishing the Areas of Special Flood Hazard and  
20 Water Quality Impact.

21 A. Maps and Studies Adopted by Reference. Areas subject  
22 to the restrictions and prohibitions of this overlay district  
23 are indicated on the map entitled "City of Troutdale  
24 Flood Plain and Stream Corridor Map" on file in the  
25 Community Development Department.

- 26 1. The description of flood-prone areas on this map  
27 are based on the areas of special flood hazard  
28 identified by the Federal Insurance Administration  
29 in a scientific and engineering report entitled "The

1 Flood Insurance Study for the City of Troutdale  
2 dated September 30, 1988. If FIRM maps are  
3 revised in the future, these revisions will define  
4 areas of special flood hazard. This 1988 study,  
5 with accompanying Flood Insurance Maps is  
6 hereby adopted by reference and declared to be  
7 part of this ordinance.

8 2. This map is also based on the City's interpretation  
9 of the location of streams, rivers and their banks,  
10 and the best topographical information available.

11 B. Topographic Survey. Where development, excavation or  
12 vegetation removal is proposed within this overlay  
13 district, an on-the-ground topographical survey shall be  
14 prepared for the entire site. The survey shall show trees  
15 or tree clusters, existing roads, utilities and structures,  
16 with 2 foot contours. The survey maps shall be provided  
17 by the property owner or applicant for development  
18 approval.

19 4.614 Interpretation. In the interpretation and application of this  
20 ordinance, all provisions shall be:

- 21 A. considered as minimum requirements;
- 22 B. liberally construed in favor of the governing body; and,
- 23 C. deemed neither to limit nor repeal any other powers  
24 granted under State statutes; and
- 25 D. definitions shall be as specified in Section 1.040.

26 4.615 Warning and disclaimer of liability. The degree of flood protec-  
27 tion required by this ordinance is considered reasonable for  
28 regulatory purposes and is based on scientific and engineering  
29 considerations. Larger floods can and will occur on rare occa-  
30 sions. Flood heights may be increased by man-made or natural

1 causes. This ordinance does not imply that land outside the  
2 areas of special flood hazards or uses permitted within such  
3 areas will be free from flooding or flood damage. This  
4 ordinance shall not create liability on the part of the City of  
5 Troutdale, any officer or employee thereof, or the Federal  
6 Insurance Administration, for any damages that result from  
7 reliance on this ordinance or any administrative decision  
8 lawfully made hereunder.

9 4.616 Permit Required.

10 A. Alteration within Floodplain. A permit shall be obtained  
11 before vegetation removal, excavation, construction or  
12 development begins within any area of special flood  
13 hazard established in Section 4.613. The permit shall be  
14 for all structures and all development including fill,  
15 vegetation removal, excavation and other activities that  
16 may adversely affect water quality or increase flood  
17 hazard.

18 B. Uses Permitted - Floodway or Within 50 Feet of Top of  
19 Bank:

- 20 1. Open space and trails as designated by the "Parks  
21 Plan," provided they are constructed consistent  
22 with standards on file in the Community  
23 Development Department.
- 24 2. Removal of refuse and unauthorized fill.
- 25 3. Removal of nuisance or invasive plant species, or  
26 planting of approved vegetation species on the  
27 Portland Plant List kept on file at the Community  
28 Development Department.
- 29 4. Removal of dead or dying trees that are an  
30 imminent danger to public safety as determined by  
31 the Director.

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4
5. Construction of public utilities necessary to support permitted development outside the floodplain, subject to construction standards on file in the Public Works Department.
- 5  
6
6. Expansion of existing roadways and public utility facilities.
- 7  
8
- C. Prohibited uses within Floodway or 50 feet from top of bank, unless specifically permitted under this Chapter:
- 9
1. Man-made structures.
- 10
2. Vegetation removal.
- 11
3. Road construction.
- 12
4. Excavation.
- 13  
14
- D. Uses Permitted within Floodplain, outside of Floodway and 50 feet beyond the top of bank:
- 15
1. Open space and trails as designated by the "Parks Plan," provided they are constructed consistent with standards on file in the Community Development Department.
- 16  
17  
18
2. Removal of refuse and unauthorized fill.
- 20
3. Land planned for residential, public or commercial use at the time of adoption of this section: any structure permitted in the underlying district may occupy up to 30% of the floodplain area, provided the standards of this Code are met.
- 21  
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24
4. For land planned for industrial use at the time of adoption of this section: any use or structure
- 25  
26

1 permitted in the underlying district may be  
2 permitted anywhere within the floodplain area,  
3 provided the standards of this Code are met.

- 4 5. Removal of nuisance or invasive plant species, or  
5 planting of approved vegetation species, included  
6 on the Portland Plant List kept on file at the  
7 Community Development Department.

8 4.617 Application for Permit. Applications for a Flood Hazard permit  
9 shall be made and may include, but are not limited to:

- 10 A. Plans in duplicate drawn to scale showing the nature,  
11 location, dimensions, and elevations of the area in  
12 question.
- 13 B. Existing or proposed structures, fill, storage of materials,  
14 drainage facilities, and the location of the foregoing.
- 15 C. Elevation in relation to mean sea level, of the lowest  
16 floor (including basement) of all structures;
- 17 D. Elevation in relation to mean sea level to which any  
18 structure has been floodproofed;
- 19 E. Certification by a registered professional engineer or  
20 architect that the floodproofing methods for any  
21 nonresidential structure meet the floodproofing criteria in  
22 Section 4.629;
- 23 F. Submission Requirements. Except for single-family  
24 residences on existing lots, where development is  
25 proposed within the floodplain, the Director shall require  
26 submission of the following special reports, prepared by  
27 professionals in their respective fields:
- 28
- 29 1. Hydrology and Soils Report. This report shall  
30 include information on the hydrological activities of

1 the site, the effect of hydrologic conditions on the  
2 proposed development, and any hydrological or  
3 erosion hazards. This report shall also include  
4 characteristics of the soils on the site, suitability  
5 for development, its carrying capacity, and erosion  
6 or slumping characteristics that might present a  
7 hazard to life and property, or adversely affect the  
8 use or stability of a public facility or utility. Finally,  
9 this report shall include information on the nature,  
10 distribution and strength of existing soils; the  
11 adequacy of the site for development purposes;  
12 and an assessment of grading procedures required  
13 to impose the minimum disturbance to the natural  
14 state. The report shall be prepared by a  
15 professional engineer registered in Oregon.

16 2. Grading Plan. The grading plan shall be specific to  
17 a proposed physical structure or use and shall  
18 include information on terrain (two-foot intervals of  
19 property), drainage, direction of drainage flow,  
20 location of proposed structures and existing  
21 structures which may be affected by the proposed  
22 grading operations, water quality facilities, finished  
23 contours or elevations, including all cut and fill  
24 slopes and proposed drainage channels. Project  
25 designs including but not limited to locations of  
26 surface and subsurface devices, walls, dams,  
27 sediment basins, storage reservoirs, and other  
28 protective devices shall form part of the  
29 submission. The grading plan shall also include a  
30 construction phase erosion control plan and a  
31 schedule of operations and shall be prepared by a  
32 professional engineer registered in Oregon.

33 3. Vegetation Report. This report shall consist of a  
34 survey of existing vegetative cover, whether it is  
35 native or introduced, and how it will be altered by  
36 the proposed development. Measures for re-

1 vegetation with approved plant species will be  
2 clearly stated, as well as methods for immediate  
3 and long-term stabilization of slopes and control of  
4 soil erosion. The vegetation report shall be  
5 prepared by a landscape architect, landscape  
6 designer, botanist or arborist with specific  
7 knowledge of approved plant species, planting and  
8 maintenance methods, survival rates, and their  
9 ability to control erosion and sedimentation. The  
10 contractor for installation and maintenance will be  
11 responsible for replacing any approved plant  
12 species that do not survive the first two years after  
13 planting.

14 G. Approval Standards. The required reports shall include  
15 design standards necessary for the engineer and  
16 landscape expert to certify that limited development  
17 within the floodplain, when combined with impacts from  
18 adjacent development, will not increase runoff,  
19 sedimentation to affected streams or wetlands, or  
20 erosion potential more than 10% above base conditions.  
21 These requirements shall be incorporated as conditions  
22 into the final decision approving the proposed  
23 development.

24 1. The impervious surface area of any residential lot  
25 or commercial or industrial site (including  
26 driveways, sidewalks, structures, swimming pools,  
27 and any other area not covered by vegetation) shall  
28 not exceed 30 percent floodplain area;

29 2. Development shall not result in cuts or fills in  
30 excess of three (3) feet except for basement  
31 construction unless specifically approved by the  
32 City.

33 3. Except for land planned for industrial use at the  
34 time of adoption of this section, at least half the

1 floodplain outside the floodway shall remain  
2 vegetated and undisturbed. The existing tree  
3 canopy shall be retained wherever possible, and  
4 shall be considered in meeting this standard.

5 4. If development is proposed within floodplain areas,  
6 a mitigation plan for disturbed areas shall be  
7 prepared and implemented. This plan shall provide  
8 for the replanting and maintenance of approved  
9 plant species designed to achieve pre-disturbance  
10 conditions.

11 5. The applicant's engineering plans shall certify that  
12 runoff and sedimentation from the site will not  
13 increase more than 10% above conditions present  
14 on the site as of January 1, 1994.

15 6. The applicant's engineer shall provide a  
16 construction erosion control plan and water quality  
17 plan, consistent with the provisions of Section  
18 5.600.

19 7. Assurances and penalties for failure to comply with  
20 mitigation, engineering, erosion and water quality  
21 plans required under this section shall be as stated  
22 in TDC 5.617 and 5.618, respectively.

23 4.618 Use of Other Base Flood Data. When base flood elevation data  
24 has not been provided in accordance with Section 4.613 the  
25 City of Troutdale may obtain, review, and reasonably utilize  
26 any base flood elevation and floodway data available from a  
27 federal, State or other source, in order to administer the Flood  
28 Hazard Overlay District section.

29 4.619 Information to be Obtained and Maintained.

30 A. Where base flood elevation data is provided through the  
31 Flood Insurance Study or required as in Section 4.618,



1 the developer shall obtain and record the actual elevation  
2 (in relation to mean sea level) of the lowest floor  
3 (including basement) of all new or substantially improved  
4 structures, and whether or not the structure contains a  
5 basement.

6 B. For all new or substantially improved floodproofed struc-  
7 tures:

- 8 1. Verify and record the actual elevation (in relation to  
9 mean sea level).
- 10 2. Maintain the floodproofing certifications required in  
11 Section 4.619.
- 12 3. Maintain for public inspection all records pertaining  
13 to the provisions of this ordinance.

14 4.620

Alteration of Watercourses. Alterations and relocations  
15 of the water courses of Arata, Salmon or Beaver Creeks  
16 or the Sandy River are prohibited, except to  
17 accommodate projects identified in the City of Troutdale  
18 Public Facilities Plan.

19 A. The City shall notify adjacent communities and the  
20 U.S. Army Corp of Engineers and other affected  
21 agencies prior to any alteration or relocation of a  
22 watercourse, and submit evidence of such  
23 notification to the Federal Insurance  
24 Administration.

25 B. The City shall require that the developer maintain  
26 the altered or relocated portion of said watercourse  
27 so that the flood carrying capacity is not  
28 diminished.

29 4.621

Interpretation of FIRM Boundaries or Tops of Banks. Make  
30 interpretations where needed, as to exact location of the

1 boundaries of the areas of special flood hazards (for example,  
2 where there appears to be a conflict between a mapped  
3 boundary and actual field conditions). The person contesting  
4 the location of the boundary shall be given a reasonable  
5 opportunity to appeal the interpretation as provided in Section  
6 4.622.

7 4.622 Variance Procedures.

8 A. The Planning Commission shall hear and decide appeals  
9 and requests for variances from the requirements of this  
10 code.

11 B. The Planning Commission shall hear and decide appeals  
12 when it is alleged there is an error in any requirement,  
13 decision, or determination made by the City of Troutdale  
14 in the enforcement or administration of this code.

15 C. Those aggrieved by the decision of the Planning  
16 Commission, or any taxpayer, may appeal such decision  
17 to the City Council, as provided in Chapter 16.  
18

19 D. In passing upon such applications, the Planning  
20 Commission shall consider all technical evaluations, all  
21 relevant factors, standards specified in other sections of  
22 this ordinance, and:

23 1. The danger that materials may be swept onto other  
24 lands to the injury of others;

25 2. The danger to life and property due to flooding or  
26 erosion damage;

27 3. The susceptibility of the proposed facility and its  
28 contents to flood damage and the effect of such  
29 damage on the individual owner;

- 1 4. The importance of the services provided by the  
2 proposed facility to the community;
- 3 5. The necessity to the facility of a waterfront  
4 location, where applicable;
- 5 6. The availability of alternative locations for the  
6 proposed use which are not subject to flooding or  
7 erosion damage;
- 8 7. The compatibility of the proposed use with existing  
9 and anticipated development;
- 10 8. The relationship of the proposed use to the  
11 Comprehensive Plan and flood plain management  
12 program for that area;
- 13 9. The safety of access to the property in times of  
14 flood for ordinary and emergency vehicles;
- 15  
16 10. The expected heights, velocity, duration, rate of  
17 rise, and sediment transport of the flood waters  
18 and the effects of wave action, if applicable,  
19 expected at the site; and
- 20 11. Impacts on water quality or native vegetation.
- 21 12. The costs of providing governmental services  
22 during and after flood conditions, including  
23 maintenance and repair of public utilities and  
24 facilities such as sewer, gas, electrical, and water  
25 systems, and streets and bridges.
- 26 E. Upon consideration of the factors of Section 4.622 (D)  
27 and the purpose of this ordinance, the Planning  
28 Commission may attach such conditions to the granting  
29 of variances as it deems necessary to further the  
30 purpose of this ordinance.

1 F. The City of Troutdale shall maintain the records of all  
2 appeal actions and report any variances to the Federal  
3 Insurance Administration upon request.

4 G. Conditions for Variances.

5 1. Generally, the only condition under which a  
6 variance from the elevation standard may be issued  
7 is for new construction and substantial improve-  
8 ments to be erected on a lot of one-half acre or  
9 less in size contiguous to and surrounded by lots  
10 with existing structures constructed below the  
11 base flood level, providing items 1-11 in Section  
12 4.622 have been fully considered. As the lot size  
13 increases the technical justification required for  
14 issuing the variance increases.

15 2. Variances may be issued for the reconstruction,  
16 rehabilitation, or restoration of structures listed on  
17 the National Register of Historic Places or the State  
18 Inventory of Historic Places, without regard to the  
19 procedures set forth in this section.

20 3. Variances shall not be issued within a designated  
21 floodway if any increase in flood levels during the  
22 base flood discharge would result.

23 4. Variances shall only be issued upon a  
24 determination that the variance is the minimum  
25 necessary, considering the flood hazard, native  
26 vegetation and water quality, to afford relief.

27 5. Variances shall only be issued upon:  
28 a. A showing of good and sufficient cause;  
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b. A determination that failure to grant the variance would result in exceptional hardship to the applicant.

c. A determination that the granting of a variance will not allow or result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances.

6. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated neighborhoods. As such, flood variances from the flood elevations should be quite rare.

7. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 4.622 (F) [1] and otherwise complies with Sections 4.624-4.625.

8. An applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

1 4.623 Provisions for flood hazard reduction. In all areas of special  
2 flood and water quality hazards, the following standards are  
3 required:

4 4.624 Anchoring.

5  
6 A. All new construction and substantial improvements shall  
7 be anchored to prevent flotation, collapse, or lateral  
8 movement of the structure.

9  
10 B. All manufactured homes must likewise be anchored to  
11 prevent flotation, collapse or lateral movement, and shall  
12 be installed using methods and practices that minimize  
13 flood damage. Anchoring methods may include, but are  
14 not limited to, use of over-the-top or frame ties to  
15 ground anchors (Reference FEMA's "Manufactured  
16 Home Installation in Flood Hazard Areas" guidebook for  
additional techniques).

17 4.625 Construction Materials and Methods.

18 A. All new construction and substantial improvements shall  
19 be constructed with materials and utility equipment  
20 resistant to flood damage.

21 B. All new construction and substantial improvements shall  
22 be constructed using methods and practices that  
23 minimize flood damage.

24 C. Electrical, heating, ventilation, plumbing, and air  
25 conditioning equipment and other service facilities shall  
26 be designed and/or otherwise elevated or located so as  
27 to prevent water from entering or accumulating within  
28 the components during conditions of flooding.

29 D. No construction materials or methods may be used  
30 within the floodplain that would impair or damage water  
31 quality or native vegetation.

1 4.626

Utilities.

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A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

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B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and,

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12

C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

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D. Utility and road placement shall occur outside the Floodplain, and 50' beyond the top of stream or river bank, unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative.

18 4.627

Subdivision, Planned Unit Development, Commercial, Industrial, Multi-Family and Public Development Proposals.

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21

A. All proposals shall be consistent with the need to minimize flood and water quality damage;

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B. All proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood and water quality damage;

25  
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27

C. All proposals shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality;

28  
29

D. Where base flood elevation data has not been provided or is not available from another authoritative source, the

1 developer shall provide this information prior to submittal  
2 for subdivisions and other proposed developments .

3 4.628 Review of Building Permits. Where elevation data is not  
4 available either through Flood Insurance Study or from another  
5 authoritative source (Section 4.618), applications for building  
6 permits shall be reviewed to assure that proposed construction  
7 will be reasonably safe from flooding. The test of  
8 reasonableness is a local judgment and includes use of  
9 historical data, high water marks, photographs of past  
10 flooding, etc., where available. Failure to elevate at least two  
11 feet above grade in these zones may result in higher insurance  
12 rates.

13 4.629 Specific Standards. In all areas of special flood hazards where  
14 base flood elevation data has been provided as set forth in  
15 Section 4.613, Basis for Establishing the Areas of Special  
16 Flood Hazard or Section 4.618, Use of Other Flood Data, the  
17 following provisions are required:

18 A. Residential Construction.

- 19 1. New residential and substantial improvements of  
20 any residential structure shall either have the  
21 lowest floor, including basement, elevated to the  
22 level of the base flood elevations.
- 23 2. Fully enclosed areas below the lowest floor that  
24 are subject to flooding are prohibited, or shall be  
25 designed to automatically equalize hydrostatic  
26 flood forces on exterior walls by allowing for the  
27 entry and exit of floodwaters. Designs for meeting  
28 this requirement must either be certified by a  
29 registered professional engineer or architect or  
30 must meet or exceed the following minimum  
31 criteria:



- 1 a. A minimum of two openings having a total  
2 net area of not less than one square inch for  
3 every square foot of enclosed area subject to  
4 flooding shall be provided.
- 5 b. The bottom of all openings shall be no higher  
6 than one foot above grade.
- 7 c. Openings may be equipped with screens,  
8 louvers, or other devices provided that they  
9 permit the automatic entry and exit of  
10 floodwaters.

11 B. Nonresidential Construction.

12 New construction and substantial improvement of any  
13 commercial, industrial or other nonresidential structure  
14 shall have the lowest floor, including basement, elevated  
15 to the level of the base flood elevation; or together with  
16 attendant utility and sanitary facilities, shall:

- 17 1. Be floodproofed so that below the base flood level  
18 the structure is watertight with walls substantially  
19 impermeable to the passage of water.
- 20 2. Have structural components capable of resisting  
21 hydrostatic and hydrodynamic loads and effects of  
22 buoyancy;
- 23 3. Be certified by a professional engineer registered in  
24 Oregon or an architect that the design and  
25 methods of construction are in accordance with  
26 accepted standards of practice for meeting  
27 provisions of this subsection based on their  
28 development and/or review of the structural  
29 design, specifications and plans. Such certifica-  
30 tions shall be provided to the official as set forth in  
31 Section 4.619 (B).

- 1                   4.    Nonresidential structures that are elevated, not  
2                                   floodproofed, must meet same standards for space  
3                                   below the lowest floor as described in Section  
4                                   4.629 A (2).
- 5                   5.    Applicants floodproofing nonresidential buildings  
6                                   shall be notified that flood insurance premiums will  
7                                   be based on rates that are one foot below the  
8                                   floodproofed level (e.g. a building constructed to  
9                                   the base flood level will be rated as one foot below  
10                                  that level).

11    4.630    Manufactured Homes. All manufactured homes to be placed  
12                                   or substantially improved within Zones A1-30, AH, and AE  
13                                   shall be elevated on a permanent foundation such that the  
14                                   lowest floor of the manufactured home is at or above the base  
15                                   flood elevation and be securely anchored to an adequately  
16                                   anchored foundation system in accordance with the provisions  
17                                   of Section 4.624.

18    4.631    Floodways.

- 19            A.    Encroachment Prohibited. Prohibit encroachment, including fill,  
20                                   new construction, substantial improvements, and other  
21                                   developments.
- 22
- 23            B.    Exception: Utilities necessary to serve permitted development,  
24                                   and single family homes on legally-approved lots of record,  
25                                   may be permitted where a professional engineer registered  
26                                   in Oregon certifies that encroachments shall not result in any  
27                                   increase in flood levels during the occurrence of the base flood  
28                                   discharge, and that water quality will not be adversely  
29                                   affected.

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31    4.632    Encroachments. The cumulative effect of any proposed  
32                                   development shall not increase the water surface elevation of  
33                                   the base flood . On-site flood storage capacity shall not

1 decrease as a result of development, vegetation removal or  
2 excavation.

3 4.633 Wetlands.

4 A. Prohibitions. Development, vegetation removal and  
5 excavation shall be prohibited on, or within 25 feet of,  
6 wetlands located within, or partially within, the Flood  
7 Hazard and Water Quality Overlay District.

8 B. Exceptions. Utilities necessary to serve development  
9 outside the floodplain may be permitted, provided that  
10 the design and re-vegetation standards of this section  
11 are met.

12 4.634 Residential Density Allowance and Transfer Provisions.

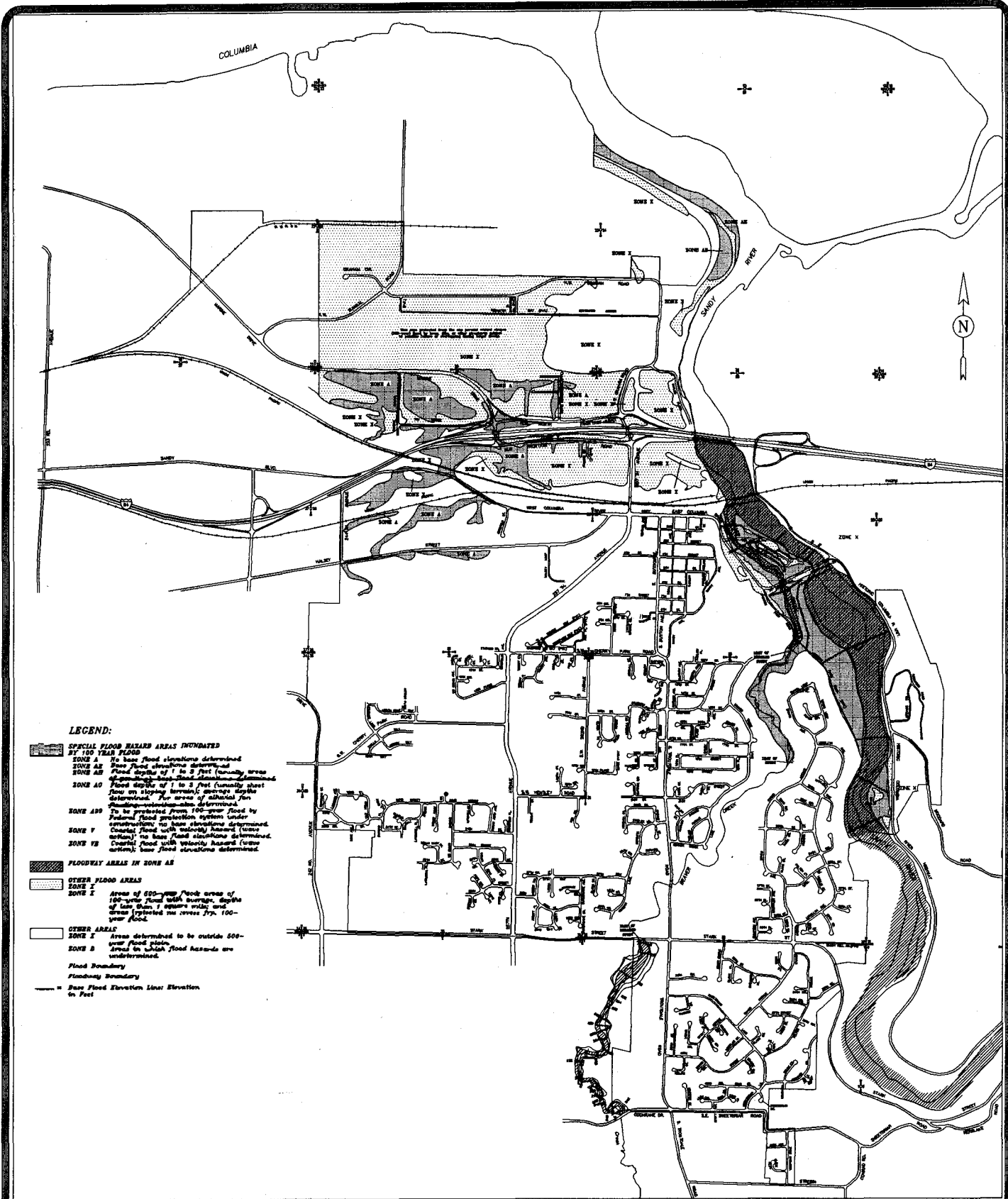
13 A. Floodplain. Floodplain areas outside Floodway and 50  
14 foot stream bank setback: residential density allowed in  
15 this portion of the floodplain shall be 70 percent of the  
16 density otherwise permitted in the underlying residential  
17 zoning district. The remaining 30 percent of the  
18 otherwise permitted density may be transferred to  
19 buildable portions of the site (i.e., areas entirely outside  
20 the 100-year floodplain and 50 foot stream setback).

21 B. Floodway and Stream Bank Setback. Areas within the  
22 Floodway and 50 foot stream bank setback: density may  
23 be transferred to buildable portions of the site at a rate  
24 of one unit per acre.






25 C. Maximum Density Increase. The net increase in density  
26 as a result of density transfer shall not exceed 50% of  
27 the base density that would otherwise be allowed on  
28 buildable portions of the lot. Single-family residential lot  
29 sizes on buildable land may be as small as 5,000 square  
30 feet to allow for density transfer.

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D. Exception. Each lot-of-record, that has received planning approval from either Multnomah County or the City of Troutdale, may have one dwelling unit, provided that the siting, engineering, erosion control, water quality and re-vegetation standards of this Section have been fully satisfied. No new lot shall be approved for development which is exclusively within the Floodway or stream bank setback area.



**LEGEND:**

-  **SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100 YEAR FLOOD**
- ZONE A** To base flood elevations determined
- ZONE AS** Base flood elevations determined
- ZONE AO** Flood depths of 1 to 3 feet (usually areas of gentle slope, base flood elevations determined)
- ZONE ADV** Flood depths of 1 to 3 feet (usually steep flow on sloping terrain), average depth determined. For areas of shallow flow, depth-determination determined.
- ZONE F** To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined. Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE V2** Coastal flood with velocity hazard (wave action); base flood elevations determined.
-  **FLOODWAY AREAS IN ZONE AS**
- OTHER FLOOD AREAS**
- ZONE X**
- ZONE Y** Areas of 500-year flood areas of 100-year flood with average depth of less than 1 square mile; and areas (excluding the areas from 100-year flood).
- OTHER AREAS**
- ZONE Z** Areas determined to be outside 500-year flood plain.
- ZONE B** Areas in which flood hazards are undetermined.
-  Flood Boundary
-  Floodway Boundary
-  Base Flood Elevation Line; Elevation in Feet

FILE NAME: FLOOD  
 TITLE BLOCK: TB8X11  
 EXTERNAL REFERENCES: TROUTBAS;  
 PLOT DATE: 06-01-94  
 BY: J.M.  
 PREVIOUS REVISION DATE: NONE



DEPARTMENT OF PUBLIC WORKS  
 CITY OF TROUTDALE

**FLOOD MAP**

MULTNOMAH COUNTY, OREGON  
 JUNE 1994

1      5.600      EROSION CONTROL AND WATER QUALITY STANDARDS.

2      5.610      Purpose. The purpose of these standards is to reduce the  
3 amount of sediment and pollutants reaching the public storm  
4 and surface water system resulting from development,  
5 construction, grading, excavating, clearing, and any other  
6 activity which accelerates erosion or increases water pollution.  
7 The objective is to control erosion and pollution at its source  
8 in order to maintain and improve water quality and reduce  
9 downstream impacts.

10     5.611     Applicability. An erosion control and mitigation plan shall be  
11 required and approved by the Director under any of the  
12 following circumstances:

13             A.    Prior to final plat approval for any subdivision, in  
14 accordance with Chapter 7.100.

15             B.    Prior to Site Orientation and Design Review, in  
16 accordance with Chapter 8.050.

17             C.    Prior to approval of any building or grading permit that  
18 results in:

19                     1.    Disturbance of 1,000 square feet or more of land  
20 surface area.

21                     2.    Land or native vegetation disturbance within 50  
22 horizontal feet of top of bank of any wetland,  
23 stream or river.

24                     3.    Disturbance of land or vegetation affecting 500  
25 square feet or more of land area on slopes of 25  
26 percent or greater.

27             D.    Farming activities are exempt from the provisions of  
28 Section 5.611.C.1, provided that the specific land area  
29 has been cultivated within the last three years.

1 E. Upon a finding that visible or measurable erosion has  
2 entered, or is likely to enter, the public storm and  
3 surface water system. As used in this section, "visible  
4 or measurable erosion" shall include the following:

5 1. Depositions of soil or sediment exceeding one  
6 cubic foot in volume on a public or private street,  
7 adjacent property, or into the surface water  
8 management system either by direct deposit,  
9 dropping, discharge or as a result of erosion.

10 2. Flows of water over bare soils, turbid or sediment  
11 laden flows, or evidence of on-site erosion such as  
12 rivulets or bare soil slopes, where the flow of  
13 water is not filtered or captured on the site.

14 3. Earth slides, mud flows, earth sloughing, or other  
15 earth movement which leaves the property of  
16 origin.

17 F. Single Family Lot Exemption - Standard Erosion Control  
18 Plan.

19 Standard Erosion Control Plan Option. In lieu of  
20 compliance with TDC 5.614 the developer may choose  
21 to follow the requirements of the Standard Erosion  
22 Control Plan, approved by the Planning Commission and  
23 on file in the Community Development Department in the  
24 following circumstances:

25 a. The lot is 20,000 square feet or less.

26 b. No portion of the lot exceeds 5% slope.

27 Nothing in this section shall relieve any person from the  
28 obligation to comply with the regulations or permits of any

1 federal, state, or local authority. See also Troutdale City Code,  
2 Chapter 12.09.

3 5.612 Approval Standards. The Director shall make the following  
4 affirmative findings prior to approval of an erosion control  
5 plan:

6 A. The project has been designed to minimize disturbance  
7 of natural topography, native vegetation and soils,  
8 consistent with applicable provisions of Sections 4.300  
9 (Hillside Preservation) and 4.600 (Flood Hazard).

10 B. The site design maximizes the preservation of healthy  
11 trees, understory shrubs and ground cover.

12 C. The plan complies with the applicable technical  
13 guidelines, as determined by the Public Works Director.  
14 In the case of erosion control standards, the City of  
15 Gresham *Erosion Control Plans Technical Guidance*  
16 *Handbook*, April 1991 Edition, shall be the recognized  
17 authority. In the case of water quality facilities, the  
18 *Stormwater Management Manual for the Puget Sound*  
19 *Basin*, February 1992 Edition, shall be the recognized  
20 authority.

21 5.613 Erosion Control Plan Submission Requirements. The required  
22 erosion control plan shall include a narrative description and  
23 scaled drawings which address:

24 A. The physical characteristics of the site, including a map  
25 of existing topography at 2 foot contour intervals, the  
26 location of water areas, and a narrative description of  
27 soil characteristics. The requirement for a 2 foot contour  
28 map may be waived by the Director where this  
29 information is not readily available, and erosion potential  
30 is minor.



1 B. The nature of the proposed development, including any  
2 phasing plans, which may affect soils or create soil  
3 erosion. Areas of excavation, grubbing, clearing,  
4 stockpiling, or vegetation removal shall be specifically  
5 identified.

6 C. Specific erosion control measures and practices to be  
7 used to demonstrate compliance with Section 5.614.

8 5.614 Erosion Control Plan Standards. In addition to compliance with  
9 relevant portions of the City's Hillside and Flood Hazard  
10 Overlay Districts, the required Erosion Control Plan shall  
11 comply with the following standards:

12 A. Control Measures. Specific methods of soil erosion and  
13 sediment control shall be used during construction to  
14 minimize visible and measurable erosion. In no case shall  
15 soil erosion and sediment transport from the site exceed  
16 the rate of one ton per acre per year. These methods  
17 shall include all of the following:

18 1. The land area to be grubbed, stripped, used for  
19 temporary placement of soil, or to otherwise  
20 expose soil shall be confined to the immediate  
21 construction site only.

22 2. The duration of exposure of soils shall be kept to  
23 a minimum during construction. Exposed soils shall  
24 be covered by mulch, sheeting, temporary seeding  
25 or other suitable material following grading or  
26 construction, until soils are stabilized. During the  
27 rainy season (November through May), soils shall  
28 not be exposed for more than seven consecutive  
29 (7) days. All disturbed land areas which will remain  
30 unworked for 21 days or more during construction,  
31 shall be mulched and seeded.

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3. During construction, runoff from the site shall be controlled, and increased runoff and sediment resulting from soil disturbance shall be retained on-site. Temporary diversions, sediment basins, barriers, check dams, or other methods shall be provided as necessary to hold sediment and runoff.
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4. A stabilized pad of gravel shall be constructed and maintained at all entrances and exits to the construction site. The stabilized gravel pad shall be the only allowable entrance or exit to the site.
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5. Topsoil removal for development shall be stockpiled and reused on-site to the degree necessary to restore disturbed areas to their original or enhanced condition, or to assure a minimum of six inches of stable topsoil for re-vegetation. Additional soil shall be provided if necessary to support re-vegetation.
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6. The removal of all sediments which are carried into the streets, or on to adjacent property, are the responsibility of the developer. The applicant shall be responsible for cleaning and repairing streets, catch basins, and adjacent properties, where such properties are affected by sediments or mud. In no case shall sediments be washed into storm drains, ditches, drainageways, streams, or wetlands. See also Chapter 12.09 of the Troutdale Municipal Code, related to public facilities.
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7. Any other relevant provision of the April 1991 edition of the City of Gresham *Erosion Control Plans Technical Guidance Handbook*, required by the Director.
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- B. Restoration of Vegetation. In addition to compliance with native vegetation removal and enhancement provisions

1 of Sections 4.300 and 4.600 of this code, the developer  
2 shall be responsible for re-vegetating public and private  
3 open spaces, utility easements, and undeveloped rights-  
4 of-way in accordance with an approved Schedule of  
5 Installation.

6 1. If the vegetation existing prior to site development  
7 is non-native or invasive, it shall be replaced with  
8 native or non-invasive plant species.

9 2. Temporary measures used for initial erosion control  
10 shall not be left in place permanently.

11 3. Work areas on the immediate site shall be carefully  
12 identified and marked to reduce potential damage  
13 to trees and vegetation.

14 4. Trees shall not be used as anchors for stabilizing  
15 working equipment.

16 5. During clearing operations, trees and vegetation  
17 shall not be permitted to fall or be placed outside  
18 the work area.

19 6. In areas designated for selective cutting or  
20 clearing, care in falling and removing trees and  
21 brush shall be taken to avoid injuring trees and  
22 shrubs to be left in place.

23 7. Stockpiling of soil, or soil mixed with vegetation,  
24 shall not be permitted on a permanent basis.

25 C. Schedule of Installation. A schedule of planned erosion  
26 control and re-vegetation measures shall be provided,  
27 which sets forth the progress of construction activities,  
28 and mitigating erosion control measures.

- 1 D. Responsible Person. The developer shall designate a  
2 specific person to be responsible for carrying out the  
3 Erosion Control Plan.
- 4 E. Reference Authority. The April 1991 edition of the City  
5 of Gresham *Erosion Control Plans Technical Guidance*  
6 *Handbook* shall be the primary guide for the City of  
7 Troutdale in establishing and reviewing erosion control  
8 techniques, methods and requirements. The Director and  
9 Public Works Director may also develop regulations and  
10 procedures in accordance with the Handbook to  
11 implement erosion control measures as needed.
- 12 5.615 Plan Implementation Requirements. An approved Erosion  
13 Control Plan shall be implemented and maintained as follows:
- 14 A. Plan Approval Required Prior to Clearing or Grading. No  
15 grading, clearing or excavation of land requiring an  
16 Erosion Control Plan shall be undertaken prior to  
17 approval of the Erosion Control Plan. Erosion control  
18 measures shall be installed prior to any stripping or  
19 excavation work.
- 20 B. Implementation. The developer shall implement the  
21 measures and construct facilities contained in the  
22 approved Erosion Control Plan in a timely manner.
- 23 1. During active construction, the developer shall  
24 inspect erosion control measures daily during rainy  
25 periods. In all cases, the developer shall be  
26 responsible for maintenance, adjustment, repair  
27 and replacement of erosion control measures to  
28 ensure that they are functioning properly without  
29 interruption.
- 30 2. Eroded sediment shall be removed immediately  
31 from pavement surfaces, off-site areas, and from  
32 the surface water management system, including

1 storm drainage inlets, ditches and culverts. See  
2 also Troutdale Municipal Code, Chapter 12.09. In  
3 the event that sediment is inadvertently deposited  
4 in a wetland or stream, the developer shall  
5 immediately contact the Director and coordinate  
6 remedial actions with the City.

7 3. Water containing sediment shall not be flushed into  
8 the surface water management system, wetlands  
9 or streams without first passing through an  
10 approved sediment filtering facility or device.

11 4. When required by the Director, the developer shall  
12 maintain written records of all site inspections of  
13 erosion control measures which shall be provided  
14 to the Director upon request.

15 5. In addition, the developer shall call for City  
16 inspection, prior to the foundation inspection for  
17 any building, to certify that erosion control  
18 measures are installed in accordance with the  
19 erosion control plan.

20 C. Dust Control. Troutdale is especially susceptible to wind  
21 erosion. Therefore, the Director may require that  
22 additional dust control measures be included in the  
23 Erosion Control Plan. Such control measures may  
24 include, but are not limited to, the following:

25 1. Sprinkling access and haul roads and other  
26 exposed dust producing areas with water.

27 2. Applying dust palliatives to access and haul roads.

28 3. Establishing temporary vegetative cover.

29 4. Placing wood chips, gravel or other effective  
30 mulches on vehicle and pedestrian use areas.

- 1 5. Maintaining the proper moisture condition on all fill  
2 surfaces.
- 3 6. Pre-wetting cut and fill surface areas.
- 4 7. Using covered haul equipment.

5 D. Correction of Ineffective Measures. If the facilities and  
6 techniques approved in the Erosion Control Plan are not  
7 effective or sufficient to meet the purpose of this  
8 section, based on an on-site inspection, the Director may  
9 require a revised plan.

- 10 1. The revised Erosion Control Plan shall be provided  
11 within 5 working days of written notification by  
12 the Director.
- 13 2. The developer shall implement fully the revised  
14 plan within 5 working days of approval by the  
15 Director.
- 16 3. In cases where serious erosion is occurring, the  
17 Director may require the developer to install interim  
18 control measures immediately, before submittal of  
19 the revised Erosion Control Plan.

20 E. Additional Standards. The following additional standards  
21 shall apply:

- 22 1. Construction between stream banks shall be  
23 prohibited, unless absolutely necessary to  
24 construct required public facilities.
- 25 2. Pollutants such as fuels, lubricants, bitumens, raw  
26 sewage, and other harmful materials shall not be  
27 discharged into or near rivers, streams, or  
28 impoundments, and shall be properly stored and  
29 disposed.

1 3. Discharge of water into a stream, wetland or  
2 impoundment shall not result in altering the  
3 temperature of the water body enough to affect  
4 aquatic life.

5 4. All sediment-laden water from construction  
6 operations shall be routed through stilling basins,  
7 filtered, or otherwise treated to reduce the  
8 sediment load.

9 F. Storage. All erodible or toxic materials delivered to the  
10 job site shall be covered and protected from the weather  
11 and stored according to appropriate health and safety  
12 guidelines.

13 1. Such materials shall not be exposed during  
14 storage.

15 2. Waste material, rinsing fluids, and other such  
16 material shall be disposed of in such manner that  
17 pollution of groundwater, surface water, or air  
18 does not occur.

19 3. In no case shall toxic materials be dumped into  
20 drainageways or onto land.

21 G. Contaminated Soils. Where the construction process  
22 reveals soils contaminated with hazardous materials or  
23 chemicals, the Contractor shall stop work immediately;  
24 ensure that no contaminated material is hauled from the  
25 site; remove the work force from the contaminated area;  
26 leave all machinery and equipment; secure the area from  
27 access by the public until such time as a mitigation team  
28 has relieved them of that responsibility; notify the City  
29 of the situation upon its discovery; and prohibit  
30 employees who may have come in contact with the  
31 contaminated material from leaving the site until released  
32 by the Emergency Response Team.

1 H. Duration of Maintenance. Continuing maintenance after  
2 development pursuant to the Erosion Control Plan,  
3 including re-vegetation of all graded areas, shall be the  
4 responsibility of the developer, subsequent developers or  
5 property owners.

6 1. Erosion control measures shall be maintained  
7 during construction and for one year after  
8 development is completed.

9 2. The Director may, upon a finding that soils are  
10 completely stabilized, reduce this period.

11 5.616 Special Water Quality Treatment Facilities. Beaver Creek and  
12 the Sandy and Columbia Rivers are vitally important to  
13 Troutdale's recreational-based economy and to the quality of  
14 life of Troutdale residents. Special water quality detention and  
15 treatment facilities may be required for major developments  
16 draining to Beaver Creek, or the Sandy or Columbia Rivers,  
17 designed in accordance with the *Stormwater Management*  
18 *Manual for the Puget Sound Basin* (Washington Department of  
19 Ecology, February 1992).

20 A. Applicability. The Director shall require water quality  
21 treatment or detention facilities for developments which  
22 qualify under any of the following:

23 1. The development involves 10 acres or more.

24 2. The development occupies one acre or more of  
25 steep slope or constrained slope area.

26 3. The development will cause degradation of water  
27 quality in the receiving stream without detention or  
28 treatment.

29 4. The development involves paved parking areas  
30 (exclusive of single family and two-family



1 residences), fuel storage or dispensing areas,  
2 vehicle wash areas, or vehicle maintenance or  
3 dismantling areas.

4 B. Responsibility and Treatment Options. Water quality  
5 facilities for major developments shall be required for  
6 purposes of minimizing water quality impacts on Beaver  
7 Creek and the Sandy River, prior to deposition into  
8 natural drainageways.

9 1. Water quality facilities shall be designed and  
10 constructed by the developer, to ensure that  
11 stormwater runoff is treated on site, prior to  
12 discharge.

13 2. Treatment may include infiltration devices, grassy  
14 swales, treatment ponds or other methods  
15 approved by the City, consistent with the  
16 *Stormwater Management Manual for the Puget*  
17 *Sound Basin*, February 1992.

18 C. Placement of Water Quality Facilities. Placement of  
19 water quality facilities shall be limited as follows:

20 1. The water quality facilities shall not be constructed  
21 within an existing or created wetlands unless a  
22 mitigation plan is approved by the City and the  
23 Oregon Division of State Lands.

24 2. The water quality facility shall not be placed on  
25 land with slopes of 15% or greater, within 50 feet  
26 of the top of the bank of a stream, or within a  
27 defined floodway area.

28 3. The water quality facility may be constructed  
29 within the 100 year floodplain, provided that the  
30 area is (a) outside the area covered by the 25-year  
31 flood event, and (b) the water quality facility

1 effectively and exclusively uses native plant  
2 species.

- 3 4. Where the approval authority determines that a  
4 more efficient and effective regional site exists  
5 within the sub-basin, the water quality facility may  
6 be constructed off-site.

7 D. Water Quality Facility Standards. The design and  
8 functions of required water quality control facilities shall  
9 be determined based on the recommendations of the  
10 *Stormwater Management Manual for the Puget Sound*  
11 *Basin.*

- 12 1. The preliminary subdivision plat, site plan, or  
13 permit application shall include plans and a  
14 certification prepared by a professional engineer  
15 registered in Oregon that the proposed stormwater  
16 quality control facilities have been designed in  
17 accordance with the *Stormwater Management*  
18 *Manual for the Puget Sound Basin.*

- 19 2. The plan shall specifically consider source control  
20 of pollution (oil and water separators), runoff  
21 treatment, streambank erosion control, wetland  
22 impacts, impacts on water quality sensitive areas,  
23 and off-site analysis and mitigation (Minimum  
24 Requirements 1-14, pp. I-2-5 through I-2-14).

- 25 3. A long-term (20-year) operation and maintenance  
26 plan shall be required. This plan shall document  
27 how and by whom the water quality facility will be  
28 maintained.

- 29 4. If the water quality facility is dedicated to the City,  
30 maintenance of the facility shall be the  
31 responsibility of the developer for at least two

1 years after the facility has been constructed and  
2 approved by the City.

3 If the facility is not dedicated to the City, then it  
4 shall be the continuing responsibility of the  
5 developer.

- 6 5. In all cases, runoff from impervious areas used for  
7 repair, cleaning, refueling, storing or servicing of  
8 vehicles and machinery shall be treated on site to  
9 remove oil, grease and other chemicals.

10 5.617 Security. Except as provided by Section 5.617.B, after an  
11 Erosion Control Plan or Water Quality Facility is approved by  
12 the Director and prior to construction or grading, the applicant  
13 shall provide a performance bond or other financial guarantee  
14 in the amount of 120% of the value of the erosion control and  
15 water quality measures necessary to stabilize the site and  
16 maintain water quality. Any financial guarantee instrument  
17 proposed other than a performance bond shall be approved by  
18 the City Attorney.

19 A. Duration. The financial guarantee instrument shall be in  
20 effect for a period of at least one year (or two years in  
21 the case of a water quality facility), and shall be released  
22 when the Director determines that the site has been  
23 stabilized (or the water quality facility is operating as  
24 designed). All or a portion of the security retained by the  
25 City may be withheld for a period of up to five years  
26 beyond the one year maintenance period, if it has been  
27 determined by the Director that the site has not been  
28 sufficiently stabilized against erosion (or the water  
29 quality facility is not operating as intended).

30 B. Exemptions. Individual lots zoned for single family and  
31 two family residential use prior to the effective date of  
32 this Section, and individual lots subject to the standard

1 erosion control plan stated in 5.614 shall be exempt  
2 from the security requirements of Section 5.617.

3 C. Conflict. Due to the immediate threat to the public  
4 health, safety and welfare posed by failure to comply  
5 with the strict provisions of the erosion control measures  
6 required under this Section, the provisions of Section  
7 5.617 shall supersede the more general provisions of  
8 Troutdale Municipal Code Sections 17.050-070, where  
9 conflicts exist.

10 5.618 Penalties. Each violation of any provision of this Section, or  
11 any failure to carry out the conditions of any approval granted  
12 pursuant to this Section, shall be unlawful and a civil  
13 infraction subject to the enforcement provisions of Troutdale  
14 Municipal Code, Section 17.110, Abatement and Penalty.

15 A. Additional Penalties. In addition to those penalties  
16 available under Troutdale Municipal Code, Section  
17 17.110, the Director may enforce the following  
18 additional penalties:

19 1. Issue a stop work order where erosion control  
20 measures are not being properly maintained or are  
21 not functioning properly due to faulty installation or  
22 neglect.

23 2. Refuse to accept any development permit  
24 application, revoke or suspend any development or  
25 building permit, or deny occupancy of the subject  
26 property until erosion control measures have been  
27 installed properly and maintained in accordance  
28 with this Section.

29 B. The owner of the property from which the erosion  
30 occurs, together with any person or parties who cause  
31 such erosion, shall be responsible for mitigating the  
32 impacts of the erosion and for preventing future erosion.

33 C. Upon request of the City Administrator or at the  
34 direction of the City Council, the City Attorney may

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institute appropriate action in any court to enjoin development of a site or building project which is in violation of this Section, or to require conformance with this Section.

## FINDINGS ON ORDINANCE 607-94

1. Introduction. Ordinance No. 491-O (ordinance) amends regulations relating to controls on development for flood hazards, water quality, erosion control, and hillside protection. The ordinance is required to be consistent with acknowledged provisions of the Troutdale Comprehensive Plan (Plan). In the absence of specific Plan provisions applicable to the ordinance, it must be consistent with statewide planning goals. The City is not required to adopt findings to justify its legislative action. In this case, however, general findings are appropriate to indicate the general rationale for adoption of the ordinance.
2. Purpose of the Ordinance. There are two general deficiencies in the current Troutdale Development Code regarding development in flood sensitive areas, on sloped land or on property subject to erosion. First, the current standards do not protect land and water quality sufficiently. The City has experienced erosion and water quality problems in recent subdivisions and development approved under the current ordinances. Second, the current standards are subjective and do not allow developers to accurately predict what requirements will be imposed or provide guidance to the staff on the conditioning of land use approvals. The ordinance imposes objective requirements on developments in sensitive areas to better protect the land and water quality in the City.
3. Consistency with the Plan General Goals and Objectives. The ordinance is consistent with the General Goals and Objectives of the Comprehensive Plan, particularly Goals and Objectives 7-11. Implementation of the ordinance will encourage "excellence in all private developments." It will "encourage and promote innovation in development techniques in order to obtain maximum livability." The ordinance requires that "design for...new developments... respond to the specifics of the site." The ordinance will "maintain high air, water and land quality" and will help to "preserve those identified significant environmental and ecological resources" in the City. The ordinance will help maintain an "adequate supply of open space and...recreation areas." Finally, the ordinance has been adopted with significant citizen involvement.
4. Consistency with Plan Goal 1 and Statewide Planning Goal 1 (Citizen Involvement). The Plan policies require citizen involvement through the

Citizens Advisory Committee and public notification of land use requests. Statewide Planning Goal 1 does not apply to individual governing body actions but requires adoption of a citizens involvement program for the City. These policies are satisfied. The CAC reviewed the ordinance and advised the Planning Commission on its content. The public was notified of hearings on the ordinance before the CAC, the Planning Commission and City Council. There have been a number of hearings and opportunity for citizen participation. Staff, planning commissioners and city councilors have met with interested parties and modified the ordinance to reflect many concerns raised by interested parties.

5. Consistency with Plan - Goal 2 and Statewide Planning Goal 2 -(Land Use Planning). The Plan text recognizes that low density residential uses "may be located where there are development constraints such as slopes or flood plains if structures can be sited to avoid the problem." The applicable policies require the Plan to "identify suitable and unsuitable land for development." Policy 3. The ordinance maps lands with developmental limitations. The ordinance standards also "recognize and respect the character of established areas" by imposing different requirements for development in developed and industrial areas. Policy 7.

Generally Statewide Planning Goal 2 requires implementing ordinances to be consistent with the locality's comprehensive plan. This ordinance is consistent with the Plan. Goal 2 also requires opportunities for review and comment by citizens and affected governmental units in the amendment of implementation ordinances. Here, there has been opportunities for citizen involvement and notice of the prospective adoption of the ordinance was sent to affected governments, including DLCD.

6. Plan and Statewide Planning Goals 3 and 4 do not apply.
7. Consistency with Plan Goal 5 and Statewide Planning Goal 5 (Open Spaces, Scenic and Historic Areas and Natural Resources). Preservation of Beaver Creek and the Sandy River canyons is a core commitment of the City and objective of its Comprehensive Plan. These corridors are designated as needed open space and significant water areas under Statewide Planning goal 5 and the Plan. The ordinance is part of the City's program to implement these designations under the Goal 5 rule. The Plan recognizes the importance of water quality and protection of

water areas as wildlife habitat, for recreational and aesthetic purposes and for the protection of water areas a wildlife habitat, for recreational and aesthetic purposes and for the municipal water supply. It categorizes the City's streams as "sensitive areas" and requires protection of those areas. The ordinance is a means of protecting water areas for these purposes. The ordinance specifically implements: Policy 1 of Plan Goal 5 by limiting development that will have adverse impacts; Policy 2 as a land use regulatory measure for the conservation of surface water resources; Policy 4 by employing mechanisms to conserve groundwater sensitive areas; Policy 5 by conserving and enhancing drainageways; Policy 7 by codifying appropriate mitigation measures for the effects of development on flood control, hillside stability and erosion control; Policy 8 by conserving significant areas and encouraging new developments while maintaining wildlife consistent will allowing development; and, Policy 9 by coordinating this ordinance with state and federal agencies through notification and solicitation of comments from these agencies. The ordinance is consistent with Statewide Planning Goal 5 because it implements the City's programs to achieve the Goal that are expressed in these plan policies. It is consistent with a number of Goal 5 guidelines requiring identification of Goal 5 resources and use of techniques including "cluster developments" to implement the goal.

8. Consistency with Plan Goal 6 and Statewide Planning Goal 6 (Air, Water and Land Resources Quality). The ordinance protects water quality by limiting development on steep slopes and on highly erosive soils. The deleterious effect of development under these conditions is recognized in the Plan text discussing water quality. The ordinance implements Plan Goal 6 policies, including: Policy 5 by maintaining environmental quality through guiding development; Policy 7 by maintaining a healthful environment and Policy 8 by regulating the landscaping and design of commercial, industrial and community service development. The ordinance broadly implements Statewide Planning Goal 6 by regulating the discharge of water and soil from development so as not to degrade or exceed the carrying capacity of the City's water areas.
9. Consistency with Plan Goal 7 and Statewide Planning Goal 7 (Areas Subject to Natural Disasters and Hazards). This ordinance implements text and policies under this Plan Goal by carrying out the open space/greenway system along Beaver Creek and the Sandy River. It is a further slope restriction, consistent with the plan text describing development on slopes. The ordinance specifically implements: Policy 1



by restricting or prohibiting development in highly hazardous areas and limiting development in areas of potential hazard; Policy 2 by requiring that development occur in a manner that respects and retains natural vegetation in areas with sensitive features; Policy 3 by restricting developing in flood hazard areas; and Policy 4 by requiring mitigation in areas of steep slope or with unstable soils. The ordinance implements Statewide Planning Goal 6 by placing appropriate safeguards on the location of development in known areas of natural disasters and hazards.

10. Consistency with Plan Goal 8 and Statewide Planning Goal 8 (Recreational Needs). The ordinance is consistent with Plan Goal 8 and Statewide Planning Goal 8 by preserving areas not suitable for development for open space and limited recreational uses. It specifically implements Plan Goal 8 Policy 1 by creating additional open space areas for passive recreational use.
11. Consistency with Plan Goal 9 and Statewide Planning Goal 9 (Economic Development). The ordinance is consistent with Plan Goal 9 and Statewide Planning Goal 9. It specifically implements Plan Goal 3 which states that efforts should be made to upgrade the quality of "future industrial developments as the area grows" and Downtown Goal 4 which encourages development that is "sensitive to physical attributes and constraints and is cost effective for private development interests..." and Downtown Goal 9 which speaks to protection of "unique natural features which provide a scenic backdrop for downtown". It also implements Subarea C Goal regarding open spaces along the Sandy River and Developments which "complement natural features".
12. Consistency with Plan Goal 10 and Statewide Planning Goal 10 (Housing). The ordinance is consistent with Plan Goal 10 and Statewide Planning Goal 10 by recognizing the need to provide housing at all price ranges while preserving open space and sensitive areas in close proximity to residential development and providing mechanisms for density transfer to offset the cost of protecting steep slopes, wetlands, and flood hazard areas. It specifically implements Policy 1 which states that "development shall be sensitive to site characteristics, including topography, soil types and natural vegetation" and that residential areas be developed "in a way which will not create environmental degradation"; Policy 3 which states that the City shall "attempt to balance the benefits of regulatory actions with the cost of such regulations in relationship to the cost of housing..."; Policy 4 by implementing standards "which are essential for the public

health, safety and welfare."; and by reviewing standards to determine if they are vague or subjective and "take necessary action to make these standards clear and objective."

13. Consistency with Plan Goal 11 and Statewide Planning Goal 11 (Public Facilities and Services). The ordinance generally implements Statewide Planning Goal 11 by making the storm drainage system more efficient and "orderly." Adoption of the ordinance will reduce erosion runoff into the storm drainage system and lessen the maintenance costs for that system. There are no Plan policies for this subject.
14. Consistency with Plan Goal 12 and Statewide Planning Goal 12 (Transportation). To the extent the ordinance limits construction of streets on steeply sloped land, it implements Statewide Planning Goal 12 which requires transportation improvements to "minimize adverse...environmental impacts and costs." There are no applicable Plan policies.
15. Consistency with Plan Goals 13 and 14 and Statewide Planning Goal 13 and 14 do not contain policies or standards which affect the adoption of this ordinance. Statewide Planning Goals 15 through 19 are not relevant.

Conclusions. Based on the above findings, the ordinance is consistent with and implements the Troutdale Comprehensive Plan. To whatever extent consistency with the Statewide planning goals is required, the ordinance is consistent with these policies. The Council also adopts as supporting findings the analyses contained in the staff report dated 5/24/94. The rationale stated in these findings is not intended to state the exclusive rationale for the determine of plan and goal consistency. These findings are severable.