



# Oregon

Theodore R. Kulongoski, Governor

## Department of Land Conservation and Development

635 Capitol Street, Suite 150

Salem, OR 97301-2540

(503) 373-0050

Fax (503) 378-5518

[www.lcd.state.or.us](http://www.lcd.state.or.us)

### NOTICE OF ADOPTED AMENDMENT

May 27, 2008



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

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: City of Sandy Plan Amendment  
DLCD File Number 003-08

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Copies of the adopted plan amendment are available for review at DLCD offices in Salem, the applicable field office, and at the local government office.

Appeal Procedures\*

### **DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: June 10, 2008**

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

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

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

Cc: Gloria Gardiner, DLCD Urban Planning Specialist  
Christine Shirley, FEMA Specialist  
Ryan Miller, DLCD Flood Map Modernization Program Coordinator  
Jonathan Pheanis, City of Sandy

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# NOTICE OF ADOPTION

DEPT OF

MAY 21 2008

This form must be mailed to DLCD not later than 5 working days after adoption  
ORS 197.615 and OAR Chapter 660, Division 18

LAND CONSERVATION  
AND DEVELOPMENT

See reverse side for submittal requirements

Jurisdiction City of Sandy Local File # 08-006

Date of Adoption May 19, 2008 Date Mailed May 20, 2008

Date the Proposed Notice was Mailed to DLCD

Comprehensive Plan Text Amendment  Comprehensive Plan Map Amendment

Land Use Regulation Amendment  Zoning Map Amendment

New Land Use Regulation

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

Amend the Development Code to meet the standards of Paragraph 60.3(d) of the National Flood Insurance Program's (NFIP) regulation.

Describe how the adopted amendment differs from the proposed amendment. If it is the same, write "Same." If you did not give notice of the proposed amendment, write "N/A."

Added portions of Oregon Residential Specialty Code that relate to building w/l floodplain

Plan Map Change From no change to no change

Zone Map Change From no change to no change

Location: N/A Acres Involved: N/A

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

Applicable Goals: 1-14 Was an Exception adopted?  Yes  No

DLCD File # \_\_\_\_\_ DLCD Appeal Deadline \_\_\_\_\_

Did DLCD receive a Notice of Proposed Amendment 45 days prior to the final hearing?

Yes  No  The Statewide Planning Goals do not apply

Emergency Circumstances Required Expedited Review

Affected State or Federal Agencies, Local Governments or Special Districts: \_\_\_\_\_

Local Contact: Jonathan Pheanis, Planner Phone: 503-668-9545

Address: City of Sandy, 39250 Pioneer Blvd., Sandy OR 97055

DLCD # 003-08 (16820)



## SUBMITTAL REQUIREMENTS

ORS 197.615 and OAR Chapter 660, Division 18

1. Send this Form and **One (1)** Copy of the Adopted Amendment to:  
  
**Department of Land Conservation and Development  
1175 Court Street, N.E.  
Salem, Oregon 97310-0590**
2. Submit **three (3)** copies of bound documents and maps larger than 8 1/2 by 11 inches.
3. Adopted materials must be send to DLCD not later than **five (5)** working days following the date of the final decision on the amendment.
4. Submittal of this Notice of Adoption **must** include the text of the amendment plus **adopted** findings and supplementary information.
5. The deadline to appeal will be extended if you do not submit this Notice of Adoption within five working days of the final decision. Appeals to LUBA may be filed within 21 days of the date Notice of Adoption is sent to DLCD.
6. In addition to sending Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

If you need more copies of this form, please call the DLCD at 503-373-0050 or this form may be duplicated on green paper.

## ORDINANCE NO. 2008-07

### AN ORDINANCE AMENDING TITLE 17 OF THE SANDY MUNICIPAL CODE CHAPTER 17.10, DEFINITIONS AND CHAPTER 17.60, FLOOD SLOPE HAZARD OVERLAY DISTRICT IN COMPLIANCE WITH FEMA STANDARDS CONCERNING DEVELOPMENT WITHIN THE FLOODPLAIN; AND DECLARING AN EMERGENCY.

**Whereas**, the City of Sandy regulates development within the floodplain through Chapter 17.60, Flood Slope Hazard Overlay (FSH) district;

**Whereas**, the City previously relied upon the Oregon Model Floodplain Ordinance until January 21, 2003 with adoption of Chapter 17.60;

**Whereas**, the Federal Emergency Management Agency (FEMA) completed a re-evaluation of flood plain hazards in the City of Sandy, including a Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM);

**Whereas**, the Department of Land Conservation and Development (DLCD), on behalf of FEMA, has identified several items within the City of Sandy Development Code that do not meet current FEMA standards;

**Whereas**, Section 1361 of the Flood Insurance Act of 1968 requires the City of Sandy to update the Development Code to meet the standards of Paragraph 60.3(d) of the National Flood Insurance Program's (NFIP) regulation;

**Whereas**, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), the City of Sandy must adopt or show evidence of adoption of the required floodplain management regulations prior to June 17, 2008;

### NOW THEREFORE THE CITY OF SANDY ORDAINS AS FOLLOWS:

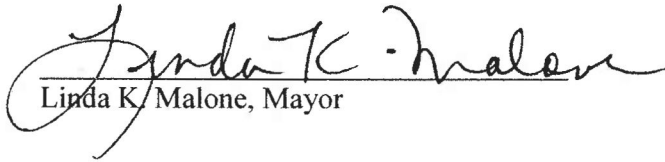
- Section 1.** Chapter 17.10 (Definitions) of the Sandy Municipal Code is amended as detailed in Exhibit A, attached and incorporated by reference. The amendments identified in Exhibit A are definitions to be added or modified to the existing chapter.
- Section 2.** Chapter 17.60 (Flood Slope Hazard Overlay district) of the Sandy Municipal Code is amended as detailed in Exhibit B, attached and incorporated by reference.
- Section 3.** It is necessary the actions taken by this ordinance in adopting revisions to existing floodplain regulations be effective immediately so that current and future residents will be eligible to participate in the National Flood Insurance Program, therefore this



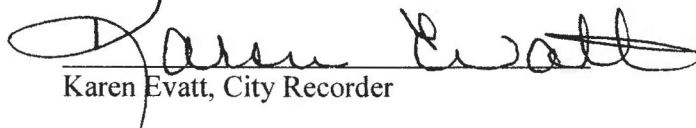
ordinance is and shall be effective from and after its passage by the Council.

**Section 4.** All remaining provisions of Chapters 17.10 and 17.60 are hereby reaffirmed in their entirety.

**THIS ORDINANCE IS ADOPTED BY THE COMMON COUNCIL AND APPROVED BY THE MAYOR THIS 19th DAY OF MAY, 2008.**

  
Linda K. Malone, Mayor

ATTEST:

  
Karen Evatt, City Recorder

## EXHIBIT A

### CHAPTER 17.10 DEFINITIONS

#### Definitions to be Added to or modified in Chapter 17.10

**AE Zone (floodway):** Area of special flood hazard with water surface elevations determined as depicted on the FIRM.

**X Zone (floodway):** Area of minimal to moderate flood hazards as depicted on the FIRM.

**Basement (inside floodway):** Any area of a building having its floor subgrade below ground level on all sides.

**Basement (outside floodway):** The portion of a building between the floor and ceiling which is partly below and partly above grade, but so located that the vertical distance from the grade to the floor below is greater than the vertical distance from the grade to the ceiling.

**Critical Facilities (floodway):** Hospitals, fire stations, police stations, storage of critical records, and similar facilities.

**Flood-proofing:** Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

**Floodway (Regulatory Floodway):** The channel of a river or ~~stream~~ other water course and the adjacent land areas that must be reserved in order to those portions of the adjoining floodplains required to carry and discharge the base flood without cumulatively increasing the water surface elevation more than a designated heightflow.

**Recreational Vehicle:** A vacation trailer or other vehicle or portable unit built on a single chassis, which is either self-propelled or towed or is carried by a motor vehicle and which is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use, ~~intended for human occupancy and is designed for vacation or recreational purposes, but not residential use.~~



## EXHIBIT B

### CHAPTER 17.60 FLOOD AND SLOPE HAZARD (FSH) OVERLAY DISTRICT

#### 17.60.00 INTENT

This chapter is intended to promote the public health, safety and general welfare by minimizing public and private adverse impacts from flooding, erosion, landslides or degradation of water quality consistent with Statewide Planning Goals 6 (Air, Land and Water Resources Quality) and 7 (Areas Subject to Natural Disasters and Hazards) and the Sandy Comprehensive Plan (SCP).

#### 17.60.10 INTERPRETATION AND MAPPING

The Director ~~shall be~~ has the ultimate responsibility for maintaining the FSH Overlay District on the City of Sandy Zoning Map, determining on-site measuring methods, and otherwise interpreting the provisions of this chapter. Technical terms used in this chapter are defined in Chapter 17.10, Definitions. This chapter does not regulate development on lots or parcels entirely outside the FSH Overlay District.

- A. FSH Overlay District. The only areas subject to the restrictions and prohibitions of the FSH overlay district are those indicated on the City of Sandy Zoning Map on file in the Planning Department. This chapter does not regulate lots or parcels entirely outside the FSH Overlay District.
- B. Development Approval Required. No development shall occur within the FSH overlay district without first obtaining City approval under the provisions of this chapter. The Director shall notify the Oregon Division of State Lands whenever any inventoried wetland is proposed for development, in accordance with ORS 227.350. In riverine situations, the Director shall notify adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse, and submit copies of such notification to the administrator.
- C. Applicant Responsibilities. The applicant for alteration or development within the FSH overlay district shall be responsible for preparing a survey of the entire site, based on site-specific field surveys or Corps of Engineers data that precisely maps and delineates the following areas:
1. The name, location and dimensions of affected streams or rivers, and the tops of their respective banks.
  2. 100-year floodplain and floodway boundaries and elevations as determined by ~~current the (June 17, 2008) FRIMF/FIS for Clackamas County and Incorporated Areas. FEMA floodplain maps or, if FEMA floodplain data are not available, based on the best available information.~~

3. -The City of Sandy FSH overlay district boundary as depicted on the City of Sandy FSH Map.
4. The water quality and slope setback area(s) as defined in Section 17.60.30.
5. The size and location of locally significant wetlands shall be determined based on the City of Sandy Locally Significant Wetland Inventory (2002) unless modified by a wetland delineation approved by the Oregon Division of State Lands and submitted to the City. Wetland delineations that have formal concurrence from the Division of State Lands shall be valid for the period specified in that agency's administrative rules.
6. Steep slope areas where the slope of the land is 25% or greater within the FSH overlay district boundary.
7. The area enclosed by a continuous line, measured 25 feet horizontally, parallel to and upland from the top of a steep slope area, where the top of the steep slope is within the FSH overlay district boundary.
8. Existing public rights-of-way, structures, roads and utilities.
9. Natural vegetation, including trees or tree clusters and understory within the FSH Overlay District boundary.
10. Existing and proposed contours at 2-foot intervals.

#### **17.60.20 PERMITTED USES AND ACTIVITIES**

This chapter lists permitted uses, or uses allowed under prescribed conditions, within the FSH overlay district. Where there are conflicts, this chapter supersedes the use provisions of the underlying district.

- A. Restricted Development Areas. Restricted development areas within the FSH overlay district as shown on the City of Sandy Zoning Map include:
  1. Slopes of 25% or greater that (a) encompass at least 1,000 square feet and (b) have an elevation differential of at least 10 feet.
  2. Protected water features, including locally significant wetlands, wetland mitigation areas approved by the Division of State Lands, and perennial streams.
  3. Required setback areas as defined in section 17.60.30.
  
- B. Permitted Uses. Permitted uses within restricted development areas are limited to the following:
  1. Open space and trails provided they are constructed consistent with standards on file in the Planning Department.
  2. Removal of refuse and permitted fill.
  3. Planting of native vegetation species included on a list maintained by the Director.
  4. Removal of non-native / invasive vegetation, dead or dying trees or vegetation that is hazardous to the public.
  5. Removal of up to two trees of 6 inches or greater dbh in a calendar year, provided that each tree removed is replaced with two native trees, each of which must be 1.5 inches or greater caliper and placed within the restricted development area of the site.
  6. Construction or expansion of public facilities or private roads necessary to support permitted development.



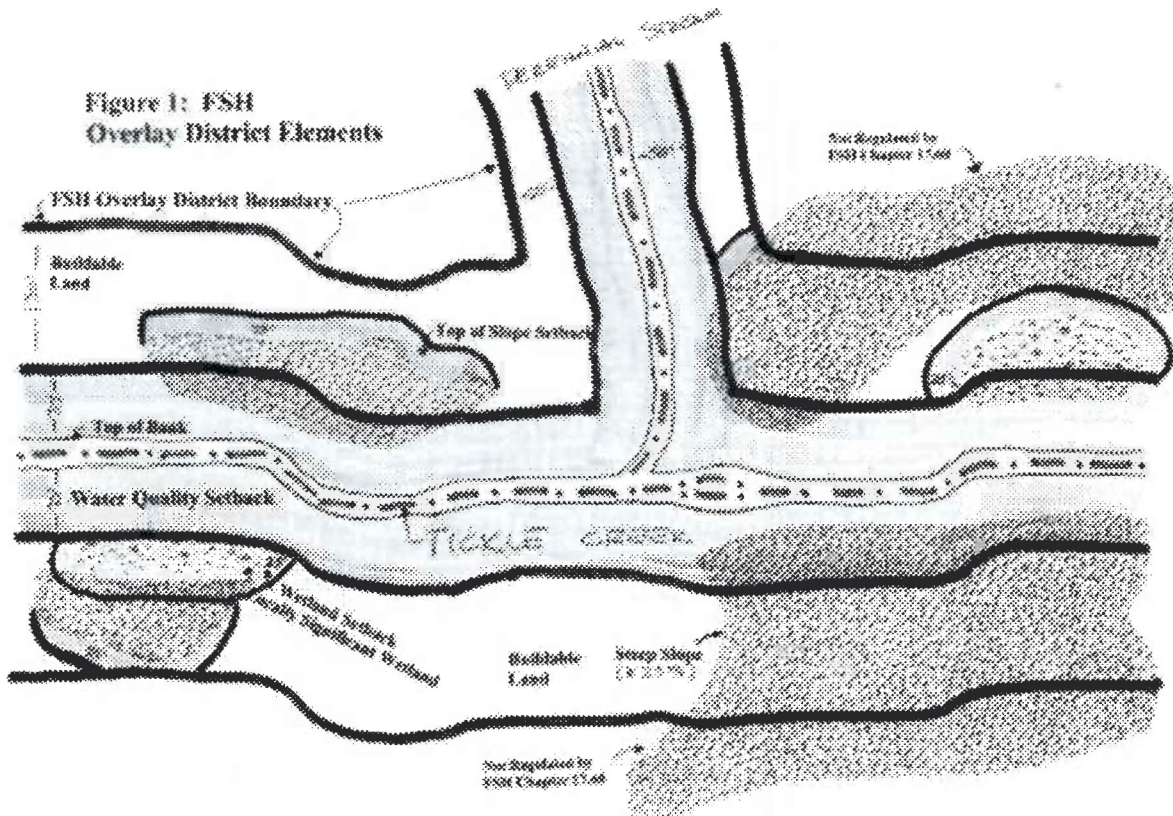
7. Construction or expansion of a single-family residence on a lot-of-record, under the following prescribed conditions:
  - a) The applicant must demonstrate that the lot has received planning approval from either Clackamas County or the City of Sandy and that there is insufficient buildable land on the same lot to allow the proposed construction or expansion.
  - b) The site review, engineering, erosion control, water quality and re-vegetation standards of this chapter have been fully satisfied.
  - c) The residence or addition has been sited so as to minimize excavation and disturbance to native vegetation on restricted development areas.
  - d) The maximum impervious surface coverage resulting from development on restricted development areas shall be 2,500 square feet. Exception: This standard may be exceeded to allow a superior private driveway design and location that reduces adverse impacts to protected areas. To exceed the standard, the applicant must demonstrate that a longer driveway will avoid required setbacks from protected water features, and that driveway construction will either: (a) more closely follow hillside contours and thereby reduce overall cut and fill area by at least 20%; or (b) avoid tree clusters and thereby reduce the number of 6-inch or greater dbh trees that must be removed by at least 20%.
  - e) The option of an adjustment under Chapter 17.60.100 has been considered as a means of avoiding or minimizing impacts on restricted development areas.
  - f) Development shall not result in cuts or fills in excess of 3 feet except for basement construction unless specifically approved by the Director.
8. Replacement of a single-family dwelling constructed over substantially the same footprint as the original dwelling.
9. Repair or stabilization of unstable slopes.
10. Stream bank restoration, subject to a stream bank restoration plan. This plan must:
  - a) Be prepared by a team of specialists in the fields of stream morphology, water quality and riparian vegetation approved by the Planning Director.
  - b) Remove invasive vegetation and replace it with multi-layered native vegetation that provides for stream shading within the entire stream bank.
  - c) Reduce the steepness of the bank along reaches that have been highly eroded.
  - d) Reduce the velocity of water carried by the stream.
  - e) Include guarantees and funding to assure at least a 90% survival rate of native plants over a 3-year period.
11. Maintenance of existing landscaping on existing lots of record is permitted and is exempt from the requirements of the FSH Overlay District.

C. Platting of New Lots. No new lot shall be platted or approved for development that is exclusively in restricted development areas as defined in subsection 17.60.20.A.

### **17.60.30 REQUIRED SETBACK AREAS**

Setback areas shall be required to protect water quality and maintain slope stability near stream corridors and locally significant wetlands. Setbacks are measured horizontally from, parallel to and upland from the protected feature.

- A. **Required Setbacks.** The required special setback(s) shall be:
1. 70 feet from the top of bank of Tickle Creek;
  2. 50 feet from top of bank along other perennial streams, except for “No Name Creek” east of Towle Drive, as provided in Section 17.60.30.C.2 below.
  3. 25 feet around the edge of any mapped locally significant wetland; and
  4. 25 feet from the top of any 25% slope break where the slope break occurs within the FSH overlay district as mapped by the city.



- B. **Minimize Impacts.** Natural vegetation shall be preserved and enhanced and excavation minimized within required water quality setback areas.
- C. **Exceptions. Intent.** Exception 1 below recognizes that existing hillside, stormwater detention and erosion control measures are sufficient to maintain water quality and quantity in areas of steep slopes separated from streams and wetlands by improved public streets in existing rights-of-way. Exception 2 recognizes that “No Name Creek” east of Towle Drive has been severely impacted by culverting, erosion and invasive plants, and has only a few remaining infill sites adjacent to its banks. This exception is intended to encourage appropriate development of these infill sites and the opening and restoration of this stream reach over time.



1. Land lying within the FSH overlay district, but upland from an existing public right-of-way with an improved public street, shall not be subject to the steep slope restrictions of this chapter. Such land shall remain subject to applicable Section 17.56 Hillside Regulations and shall comply with required setbacks set forth in subsection 17.60.30.A.3 above.
  - a. Applications for development that include only areas that meet this exception and have existing improved public streets and have no locally significant mapped wetlands are not subject to the provisions of this chapter.
2. The required setback for "No Name Creek" east of the Towle Drive crossing may be reduced to 25 feet, subject to approval of a "stream bank restoration plan" that meets the standards of Section 17.60.20.B.10.

#### **17.60.40 REVIEW PROCEDURES**

Review of development requests within the FSH Overlay District shall occur subject to the following procedures. Unless otherwise indicated below, the Director may approve Type I permits over the counter or following a field check. Type II and III development applications shall be reviewed to ensure consistency with Section 17.60.60-70. Section 17.60.50 special reports shall also be required, unless specifically exempted by the Director.

- A. Type I Procedure. The following uses shall be reviewed under a Type I procedure:
  1. Planting of native plant species identified on the Native Plant list on file with the Director.
  2. Removal of permitted fill.
  3. Removal of non-native / invasive vegetation, dead or dying vegetation that is hazardous to the public, or up to two trees of 6 inches or greater dbh in a calendar year.
- B. Type II Procedure. The following uses shall be reviewed under a Type II review procedure:
  1. Construction or expansion of major public facilities identified in sanitary, storm, water or street or parks master plans or of minor public facilities necessary to support development, where no other practical alternative exists.
  2. Construction or expansion of trails.
  3. Construction, expansion or replacement of a new single-family residence within a restricted development area or floodway on a lot of record.
  4. Repair and stabilization of unstable slopes. If emergency slope stabilization is required and authorized by the City Engineer, Type II review shall be required within 60 days of having taken the emergency action.
  5. Stream bank restoration plans.
  6. Exemption of Type II development applications from one or more required reports.
  7. Development that is completely outside restricted development areas, as determined by the Director based on site-specific information provided by the applicant consistent with Section 17.60.10.C. Such site-specific information shall remain valid for five years from the date approved by the Director, provided that topographical or hydrological changes have not occurred on the site that could invalidate such information.

reviewer and staff recommendations, shall be incorporated as conditions into the final decision approving the proposed development.

- C. Assurances and Penalties. Assurances and penalties for failure to comply with mitigation, engineering, erosion and water quality plans required under this chapter shall be as stated in Chapter 17.06.

#### **17.60.70 FLOODPLAIN REGULATIONS**

This section regulates development within the 100-year floodplain and floodway.

- A. Habitable Structures. No new habitable structures or critical facilities shall be permitted in the floodplain.
- B. Flood Storage Capacity. On-site flood storage capacity shall not decrease as a result of development. The cumulative effects of any proposed development shall not reduce flood storage capacity or raise base flood elevations on- or off-site.
- C. Public Facilities and Private Roads. Generally, public facilities and private roads shall avoid restricted development areas. However, where avoidance cannot be achieved consistent with City-approved facilities master plans and sound engineering principles, the following standards shall be met.
1. The facility shall be designed, located and constructed to minimize flood damage, excavation and loss of native vegetation and to avoid raising flood levels. Utilities necessary to serve permitted development, or a single family home on a legally-approved lot-of-record, may be permitted only where a registered professional engineer or architect certifies that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
  2. Water and sanitary sewer facilities shall be designed, located and constructed to avoid infiltration of floodwaters into the system, and to avoid discharges from such facilities to streams and wetlands.
  3. On-site septic systems and private wells shall be prohibited within the FSH overlay district.
- D. Structural Elevation Report. An application for any substantially improved structure or manufactured dwelling within the 100-year floodplain shall include the level, referenced to mean sea level, to which the structure will be flood-proofed. The level of the lowest habitable floor, and any basement area (whether or not habitable) shall also be provided. A professional engineer registered in Oregon shall prepare the structural elevation report.
- E. Existing Residential Structures. New construction and substantial improvements to an existing residential structures in a flood-prone area shall comply with the following:



Measures for re-vegetation with native plant species will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. A landscape architect, landscape designer, botanist or arborist with specific knowledge of native plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation shall prepare the vegetation report. The applicant shall be responsible for replacing any native plant species that do not survive the first two years after planting, and for ensuring the survival of any replacement plants for an additional two years after their replacement.

#### **17.60.60 APPROVAL STANDARDS AND CONDITIONS**

The approval authority may approve, approve with conditions, or deny an application based on the provisions of this chapter. The approval authority may require conditions necessary to comply with the intent and provisions of this chapter.

- A. Approval Standards. The following approval standards apply to development proposed within restricted development areas of the FSH overlay district.
1. Cumulative Impacts. Limited development within the FSH overlay district, including planned vegetation removal, grading, construction, utilities, roads and the proposed use(s) of the site will not measurably decrease water quantity or quality in affected streams or wetlands below conditions existing at the time the development application was submitted.
  2. Impervious Surface Area. Impervious surface area within restricted development areas shall be the minimum necessary to achieve development objectives consistent with the purposes of this chapter.
  3. Construction Materials and Methods. Construction materials and methods shall be consistent with the recommendations of special reports, or third-party review of special reports.
  4. Cuts and Fills. Cuts and fills shall be the minimum necessary to ensure slope stability, consistent with the recommendations of special reports, or third-party review of special reports.
  5. Minimize Wetland and Stream Impacts. Development on the site shall maintain the quantity and quality of surface and groundwater flows to locally significant wetlands or streams regulated by the FSH Overlay District.
  6. Minimize Loss of Native Vegetation. Development on the site shall minimize the loss of native vegetation. Where such vegetation is lost as a result of development within restricted development areas, it shall be replaced on-site on a 2:1 basis according to type and area. Two native trees of at least 1.5-inch caliper shall replace each tree removed. Disturbed understory and groundcover shall be replaced by native understory and groundcover species that effectively covers the disturbed area.
- B. Conditions. The required reports shall include design standards and recommendations necessary for the engineer and landscape expert to certify that the standards of this chapter can be met with appropriate mitigation measures. These measures, along with third party

8. Development requests that are similar in scope and impact, as determined by the Director. The Director shall include the justification for the classification decision in the required notice to affected property owners.

C. Type III Procedure. The Planning Commission shall review all other public and private development requests under a Type III procedure.

#### **17.60.50 SPECIAL REPORTS**

Where development is proposed on restricted development areas within the FSH overlay district as defined in Section 17.60.20.A, the Director shall require submission of the following special reports. These reports shall be in addition to other information required for specific types of development, and shall be prepared by professionals in their respective fields.

The Director may require one or more of these reports where necessary to address potential adverse impacts from development on buildable land within the FSH overlay district. The Director may exempt Type II permit applications from one or more of these reports where impacts are minimal and the exemption is consistent with the purpose of the FSH overlay zone as stated in Section 17.60.00.

A. Hydrology and Soils Report. This report shall include information on the hydrological conditions on the site, the effect of hydrologic conditions on the proposed development, the proposed development's impact on surface and groundwater flows to wetlands and streams, and any hydrological or erosion hazards. This report shall also include soils characteristics of the site, their suitability for development, carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the use or stability of a public facility or utility. Finally, this report shall include information on the nature, distribution and strength of existing soils; the adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. A licensed professional engineer registered in Oregon shall prepare the hydrology and soils report.

B. Grading Plan. The grading plan shall be specific to a proposed physical structure or use and shall include information on terrain (two-foot intervals of property), drainage, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, water quality facilities, finished contours or elevations, including all cut and fill slopes and proposed drainage channels. Project designs including but not limited to locations of surface and subsurface devices, walls, dams, sediment basins, storage reservoirs, and other protective devices shall form part of the submission. The grading plan shall also include: 1) construction phase erosion control plan consistent with the provisions of Chapter 15.44; and 2) schedule of operations. A licensed professional engineer registered in Oregon shall prepare the grading and erosion control plan.

C. Native Vegetation Report. This report shall consist of a survey of existing vegetative cover, whether it is native or introduced, and how it will be altered by the proposed development.



1. Improvements Structures shall be adequately anchored to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
2. Materials used shall be resistant to flood damage;
3. Utilities shall be designed and/or located to prevent water from entering or accumulating within the components during flooding;
4. The lowest floor (including basement) shall be elevated at or above the base flood level;
5. Fully enclosed areas below the lowest floor used for vehicle parking or building access or storage in an area other than a basement shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters shall either be designed and certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
  - a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

F. Existing Non-Residential Structures. New construction and substantial improvements to existing non-residential structures within the floodplain shall comply with one of the following:

1. Elevate the lowest floor (including basement) above the base flood level;
2. Walls and utilities of structures below the base flood level shall be watertight with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of NFIP Regulations.

G. Recreational Vehicles. Recreational Vehicles within the floodplain shall comply with one of the following:

1. Be located on the site for fewer than 180 consecutive days;
2. Be fully licensed and ready for highway use; or
3. Meet the elevation and anchoring requirements for manufactured homes and permit requirements of NFIP Regulations.

## **17.60.80 WATER QUALITY TREATMENT FACILITIES**

Tickle Creek, the Sandy River and associated natural drainage ways are vital to Sandy's recreationally based economy and to the quality of life of Sandy residents. Placement of water quality facilities shall be limited as follows:



- A. The water quality facility shall not be constructed in restricted development areas, except where necessary to serve approved development within restricted development areas (e.g., a road) and where no reasonable alternative exists in buildable areas of the site.
- B. Where the approval authority determines that a more efficient and effective regional site exists within the sub-basin, the water quality facility may be constructed off-site.

#### **17.60.90 DENSITY TRANSFER PROVISIONS**

Residential density transfer may be approved subject to the following:

- A. Required Setback Areas. Density may be transferred from restricted development areas (i.e., steep slopes, protected water features and required setbacks) to buildable portions of the site.
- B. Density Maximum. The maximum gross density for the buildable area of the site shall not exceed 150% of the maximum density allowed by the underlying zoning district for that buildable area.
- C. Housing Types Not Permitted in Underlying Zoning District. Housing types not permitted in the underlying zoning district may only be approved through the PD (planned development) or SAP (specific area plan) process.
- D. Transfer Area. Transfer of density may only occur within the same property and/or to properties contiguous to the primary property. The terms “primary property” identify the legal lot from which density is to be transferred to “secondary property(s)”. Further development or land use action on the primary or secondary properties shall be reviewed together in the same application.

#### **17.60.100 ADJUSTMENTS**

Variances to Chapter 17.60 provisions are not permitted. In contrast, adjustments to dimensional standards of the underlying zoning district may be approved when necessary to further the intent of this overlay district.

- A. Adjustment Option. One or more adjustments to the setback, height or lot area standards of the underlying zoning district may be approved to allow development consistent with the intent of the FSH overlay district. The intent of the adjustment process is to reduce adverse impacts on water quantity and quality, locally significant wetlands and perennial streams, and on the potential for slope or flood hazards.
- B. Adjustment Criteria. A special FSH adjustment may be requested when development is proposed within the FSH overlay district. Adjustments are reviewed under the procedure type applicable to the primary application. The applicant shall demonstrate that the following criteria are fully satisfied:

1. The adjustment is the minimum necessary to allow a permitted use, while at the same time minimizing disturbance to restricted development areas.
2. Explicit consideration has been given to maximizing vegetative cover, minimizing excavation and minimizing impervious surface area on restricted development areas.
3. Design options have been considered to reduce the impacts of development, including but not limited to multi-story construction, siting of residences close to streets to reduce driveway distance, maximizing the use of native landscaping materials, minimizing parking area and garage space.
4. In no case shall the impervious surface area (including the building footprint, parking areas, accessory structures, swimming pools and patios) exceed 2,500 square feet of restricted development area except for a private drive that reduces the disturbance to restricted development areas.
5. Assurances are in place to guarantee that future development will not encroach further onto restricted development areas under the same ownership.
6. The Planning Commission or Director may impose any reasonable condition necessary to mitigate identified impacts resulting from development on otherwise restricted development areas.

**17.60.110     DISCLAIMER**

The degree of hazard protection afforded by adherence to the provisions of this chapter is considered reasonable for regulatory purposes, and is based on the best available engineering and scientific information available to the City. Larger floods than those anticipated by the chapter may occur. Landslides may occur on rare occasions in areas outside of the delineated steep slope and constrained slope boundaries. This chapter does not imply that areas outside FSH overlay district or land use permitted within FSH boundaries will be free from any significant flooding, mass movement, landslide damage, erosion or water pollution. This chapter shall not create liability on the part of the City of Sandy for any damage that results from reliance on the provisions of this chapter or any administrative decision lawfully made thereunder.

**CITY OF SANDY**  
**39250 PIONEER BLVD.**  
**SANDY, OREGON 97055**



Department of Land Conservation  
and Development  
1175 Court Street, N.E.  
Salem, OR 97310-0590