

TITLE 10
CHAPTER 7

SPECIAL DEVELOPMENT STANDARDS

SECTION:

- 10-7-1: Purpose
- 10-7-2: Identification of Potential Problem Areas
- 10-7-3: Development Standards
- 10-7-4: Site Investigation
- 10-7-5: Review and Use of Site Investigation Reports (Amended Ord. 10, Series 2009)

10-7-1: PURPOSE: The purpose of this Chapter is to apply additional development standards to areas with potential natural hazards or soils which are particularly subject to erosion, landslide or seasonal surface water. Compliance with these standards is required in order to obtain a Special Use Permit. The standards are intended to eliminate the danger to the health, safety or property of those who would live in potential problem areas and the general public and to protect areas of critical environmental concern; areas having scenic, scientific, cultural, or biological importance; and significant fish and wildlife habitat as identified through Goal 5: Open Spaces and Scenic, Historic, and Natural Resources, and Goal 17: Coastal Shorelands. (Amended Ord. No. 10, Series 2009)

10-7-2: IDENTIFICATION OF POTENTIAL PROBLEM AREAS: At minimum, the following maps shall be used to identify potential problem areas:

- A. "Hazards Map", Florence Comprehensive Plan Appendix 7.
- B. "Soils Map", Florence Comprehensive Plan Appendix 7. (Ord. 625, 6-30-80)
- C. "Beaches and Dunes Overlay Zone." See Chapter 19 for overlay zone requirements. Where conflicts exist between that chapter and this one, the more restrictive requirements shall apply.
- D. Other information contained in the plan or adopted by reference into the plan, or more detailed inventory data made available after adoption of the plan may also be used to identify potential problem areas. (Amended Ord. No. 10, Series 2009)

10-7-3: DEVELOPMENT STANDARDS: The following standards shall be applied to development in potential problem areas unless an approved Phase I Site Investigation Report or an on-site examination shows that the condition which was identified in the Comprehensive Plan or Overlay Zoning Map does not in fact exist on the subject property. These standards shall be applied in addition to any standards required in the Zoning Districts, Comprehensive Plan, and to any requirements shown to be necessary as a result of site investigation. Where conflicts or inconsistencies exist between these Development Standards, City Code, and the Comprehensive Plan, the strictest provisions shall apply unless stated otherwise.

- A. Special Flood Hazard Area: All uses proposed in the flood area shall conform to the provisions of the National Flood Insurance Programs.
- B. Munsel Creek and Other Drainageways: A fifty foot (50') setback shall be required for all buildings from the creek channel, except by Planning Commission approval where it can be shown by accepted engineering practices or treatment that no erosion hazards, slide potential, or possible flood damage are likely to occur, and that riparian vegetation will be protected.
- C. River Cutbanks: No building shall be permitted within fifty feet (50') from the top of a river cutbank.
- D. Active Dune Advancing Edge: No building shall be permitted within one hundred feet (100') of the leading edge of an active dune, except by Planning Commission approval where it can be shown by accepted engineering practices or treatment, or a City approved mitigation plan that no significant sand hazards are likely to occur. Applicant shall demonstrate that the proposed or existing mitigation plan will minimize potential sand hazards to both the proposed development and to

nearby properties. Applicant shall also demonstrate that the mitigation plan will have no significant adverse affects on the site, adjacent property, the City's sole source aquifer and wildlife. (Ord. 24, Series 2008)

- E. Ocean Flooding, Tidal Flooding, Tsunami: (See subsection A above, Special Flood Hazard Area).
- F. Slopes Greater than Twelve Percent: For development on or adjacent to steep slopes, a foundation and grading design prepared by a registered engineer and approved by the City and addressing drainage and revegetation.
- G. Active Dune Sands: Open sand will require primary vegetative stabilization as with grasses and secondary stabilization with any of a variety of shrubs and trees excluding noxious plants in conjunction with any development, except where vegetative stabilization is prohibited on the property of State or Federal agencies, and it can be shown by accepted engineering practices or treatment, or a City approved mitigation plan that no significant sand hazards are likely to occur. Applicant shall demonstrate that the proposed or existing mitigation plan will minimize potential sand hazards to both the proposed development and to nearby properties. Applicant shall also demonstrate that the mitigation plan will have no significant adverse affects on the site, adjacent property, the City's sole source aquifer and wildlife. Stabilization may be required prior to development in cases where there are large unstabilized areas.
- H. Brallier and Heceta Soils: In general these soils are not suitable for development. Should development occur, structures would be built on pilings or fill as designed by a registered engineer.
- I. Yaquina Soils and Wet Areas: In areas with seasonal standing water, construction of a drainage system and/or placement of fill material shall be required according to plans prepared by a registered engineer and approved by the City. (Ord. 625, 6-30-80; amd. Ord. 669, 5-17-82) (Amended Ord. 10, Series 2009)

10-7-4: SITE INVESTIGATION REPORTS (SIR):

- A. Areas identified in Section 2 and 3 above, are subject to the site investigation requirements as presented in "Beach and Dune Techniques: Site Investigation Reports by Wilbur Ternyik" from the Oregon Coastal Zone Management Association's *Beaches and Dunes Handbook for the Oregon Coast* (OCZMA Handbook), Appendix 18 of the Florence Comprehensive Plan as modified by the City of Florence. No development permit (such as building permit or land use permit) subject to the provisions of this Title may be issued except with affirmative findings that:
 - 1. Upon specific examination of the site utilizing a Phase I Site Investigation Report (the checklist from the OCZMA Handbook, as modified by the City of Florence), it is found that the condition identified on the "Hazards Map" or "Soils Map" or "Beaches and Dunes Overlay Zone" or other identified problem area does not exist on the subject property; or
 - 2. As demonstrated by the Phase II Site Investigation Report that harmful effects could be mitigated or eliminated through, for example, foundation of structural engineering, setbacks or dedication of protected natural areas. (Amended by Ord. No. 10, Series 2009)

Site investigation requirements may be waived where specific standards, adequate to eliminate the danger to health, safety and property, have been adopted by the City. This exception would apply to flood-prone areas, which are subject to requirements of the National Flood Insurance Program and other problem areas which may be adequately protected through provisions of the Building Code. (Ord. 669, 5-17-82)
- B. Permit Fee: A fee to offset the cost of time required to investigate and prepare Findings may be set by Council Resolution.
- C. General Requirements for Phase II Site Investigation Reports shall include at least the following information. Additional information, commensurate with the level of hazard and site conditions shall be submitted.

1. Identification of potential hazards to life, proposed development, adjacent property, and the natural environment which may be caused by the proposed development.
 2. Mitigation methods for protecting the subject property and surrounding areas from each potential hazard.
 3. Acceptable development density.
 4. Identification of soils and bedrock types.
 5. Identification of soil depth.
 6. Water drainage patterns.
 7. Identification of visible landslide activity in the immediate area.
 8. History of mud or debris flow.
 9. In areas prone to landslide, mudflow and where slopes exceed 25%, reports shall identify the orientation of bedding planes in relation to the dip of the surface slope.
 10. Recommendations for removal, retention, and placement of trees and vegetation.
 11. Recommendations for placement of all structures, on site drives, and roads.
 12. Recommendations for protecting the surrounding area from any adverse effects of the development. (Amended by Ord. No. 10, Series 2009)
- D. Specific Standards for Phase II Site Investigation Reports will be determined on the basis of the information provided in the Phase I Site Investigation Report. At a minimum, specific standards shall address the following (may include more than one category listed below):
1. The SIR Phase II - Geologic Report shall follow the "Guidelines for Preparing Engineering Geologic Reports in Oregon" as adopted by the Oregon State Board of Geologist Examiners or shall meet the requirements for Site Investigation Reports as required by the Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS). The SIR Phase II – Geologic Report shall address the following:
 - a. An explanation of the site and scope of the study area (e.g. subdivision, by lot specific, or for public improvements)
 - b. An explanation of the degree the condition affects the property use in question;
 - c. An explanation of the measures to be employed to minimize detrimental impacts associated with the condition;
 - d. An explanation of the condition-associated consequences the development and the loss-minimizing measures will have on the surrounding properties.
 2. SIR Phase II dealing with Beach or Dune areas shall include the items as listed in the OCZMA Handbook, Implementation Techniques, Section III that begins on page 7.
 - a. Due to the sandy soils and the fragile nature of the vegetative covering, care shall be taken during any proposed construction in beaches and dune areas to minimize the amount of grading, excavation, removal of trees and other native vegetation in order to insure the stability of the soils.
 - b. All open sand area (pre-existing or newly created) shall be planted or stabilized as soon as practicable after construction is completed.
 - c. Using accepted re-vegetation techniques, sand areas shall be returned to their previous level of stability or to at least a conditionally stable level, following completion of construction. For large parcels or tracts, stabilization of the entire area may not be necessary as determined after consideration of a Site Investigation Report.
 - d. During extended construction periods, temporary sand stabilization measures shall be employed to minimize sand movement and erosion caused by the removal of groundcover and soil.
 3. Slopes in the 12% to 25% range: Determine the presence of soil creep, fills, or signs of past instability. If hazards are present, engineering recommendations shall be provided. If conditions require recommendations for foundation construction outside of the Building Code (IBC), those recommendations shall be provided by an appropriately qualified professional engineer. If thorough examination of the site determines that no hazards are present, documentation by an appropriately qualified professional.

4. Slopes greater than 25%:
 - a. Subsurface exploration of areas above, below, and alongside known or suspected slides
 - b. Accurate identification and measurement of the limits of the slide mass
 - c. Identification of the stability of the slide mass and the mechanics of slide movement.
 - d. Identification of the orientation of bedding planes in relation to the dip of the surface slope
 - e. A site specific grading and erosion control plan for site stabilization and construction
 - f. The methodology for determining the site stabilization plan
 - g. Recommendation of suitable setbacks, keeping in mind the anticipated life of the structure or development.

5. Foredunes:
 - a. Identification of a surveyed mean high tide line
 - b. Determination of the ocean shore vegetation line
 - c. Average annual rate that the shoreline is projected to migrate landward due to climate change (sea level rise, feet/year and increased storm intensity) and methodology used.
 - d. Historic stability of beaches in the general area
 - e. Life expectance of the structure
 - f. Elevation of the structure
 - g. Projected dune stabilization to protect site from wave action and methodology
 - h. History and projection of ocean flooding and methodology

6. Properties along the Siuslaw River Estuary:
 - a. Angle of repose for bluff material
 - b. Mean high tide, and highest measured tide
 - c. Extent of recent and historical cutbank, length of area and height of cut
 - d. Area of wave overtopping and furnish photographs or other evidence
 - e. Current and historic stability of riverbank and rates of erosion in general area.
 - f. Projected rate of erosion and methodology
 - g. Environmental resources present
 - h. Impacts to be expected
 - i. Description and photographs of current vegetation

7. Riprap or other Shoreland protective structures:
 - a. Signed certification by the engineer or geologist that the protective structure shall withstand the life of the development that it is protecting; or with the property maintenance plan, the structure shall withstand the life of the development.
 - b. Once the protective structure is completed the engineer or geologist shall provide a final summary that the protective structure was built according to the submitted plan.

8. Soils: The Site Investigation Report shall address the following development constraints for the soil types.
 - a. Brallier - These are wetlands which should not be developed due to their resource value and severe development constraints.
 - b. Dune Land - Development limitations on sand dunes can be slight to severe, depending on slope and whether adequate stabilization is done. These areas are superior to some of the other soil types in that there is no drainage problem. These areas are also known to include active sand dunes. Dune stabilization techniques should be addressed.
 - c. Heceta - These are interdunal swales and deflation plains. The high water table and poor drainage make these soils generally unsuitable for development.
 - d. Waldport - These are sand dunes which are covered with stabilization vegetation. Conditions are moderate to severe, depending on slope. The particular need here is to preserve existing vegetation and to stabilize soil which is disturbed.

- Drainage is not a problem. Areas with slopes greater than 12% should not be built on unless a site investigation determines the site to be buildable.
- e. Yaquina - These are somewhat poorly drained soils formed on an interdune position on old stabilized dunes. These areas are wet during the winter, but are better drained than Heceta. A site specific investigation would be required to determine location of swales and drainage channels.
 - f. Netarts - These are old stabilized dunes. Soils are well-drained. The topography is undulating to hilly. Where slopes are less than 12% there are few development restrictions.
 - g. Bohannon; Preacher/Bohannon/Slickrock - These areas have no restrictions except slope and suitability for forestland. They occur east of Munsel Lake Road in areas which are largely unbuildable due to slope. (Amended by Ord. No. 10, Series 2009)

10-7-5: REVIEW AND USE OF SITE INVESTIGATION REPORTS

- A. The Phase I Site Investigation Report shall be reviewed administratively. If it is found that the condition identified on the "Hazards Map" or "Soils Map" or "Beaches and Dunes Overlay Zone" or other identified problem area does not exist on the subject property; no Phase II report is required and the Site Investigation process is terminated. If hazards are found to exist, a Phase II report and a Conditional Use Permit shall be required.

If a Phase II Site Investigation Report is required, the Phase II conclusions shall be submitted for Planning Commission review.

- B. Required Certifications and Inspections:

For any Phase II SIR submitted, the registered professional of record shall be required to:

1. Review final plans for development and submit a signed and stamped certification report that all recommendations have been incorporated into development plans.
 2. Review subgrade excavations and fills for structures and stormwater drainage and submit a signed and stamped certification report that construction is proceeding in accordance with approved plans.
 3. Perform interim inspections as necessary and a final inspection of the site and submit a signed and stamped certification report that the project as constructed complies with approved plans.
- C. Conditions of approval may be imposed and/or a bond may be required to be posted prior to issuance of permit to ensure that harmful effects such as erosion, sand encroachment, destruction of desirable vegetation including inadvertent destruction by moisture loss or root damage, spread of noxious weeds, damage to archaeological resources, are mitigated or eliminated.
 - D. Approval: The property owner shall record a Covenant of Release which outlines the hazard, restrictions and/or conditions that apply to the property and shall state, "The applicant recognizes and accepts that this approval is strictly limited to a determination that the project as described and conditioned herein meets the land use provisions and development standards of the City Code and Comprehensive Plan current as of this date. This approval makes no judgment or guarantee as to the functional or structural adequacy, suitability for purpose, safety, maintainability, or useful service life of the project."
 - E. Appeal: In the case of an appeal, the City shall hire a certified engineering geologist or other appropriate certified professional to review the Phase II Site Investigation Report. All costs incurred by the city to review the development shall be the responsibility of the applicant. (Ord. No. 10, Series 2009)

Amended by Ordinance No. 15, Series 1988
Section 10-7-3-D corrected from the reference to C-2 to 10-7-3-B. (12/11/07)
Section 10-7-3-E and H amended by Ord. No. 24, Series 2008
Amended by Ord. No. 10, Series 2009