Chapter 17.88

AO PUBLIC USE AIRPORT SAFETY AND COMPATIBILITY OVERLAY ZONE

Sections:

- 17.88.010 Purpose.
- 17.88.020 Definitions.
- 17.88.030 Imaginary surface and noise impact boundary delineation.
- 17.88.040 Notice of land use and permit applications within overlay zone area.
- 17.88.050 Height limitations on allowed uses in underlying zones.
- 17.88.060 Procedures.
- 17.88.070 Land use compatibility requirements.
- 17.88.080 Water impoundments within approach surfaces and airport direct impact boundaries.
- 17.88.090 Wetland mitigation, creation, enhancement and restoration within approach surfaces and airport direct impact boundaries.
- 17.88.100 Nonconforming uses.
- 17.88.110 Avigation easement.
- 17.88.010 Purpose. The purpose of this overlay zone is to encourage and support the continued operation and vitality of the Scappoose Industrial Airpark by establishing compatibility and safety standards to promote air navigational safety at the Airpark and to reduce potential safety hazards for persons living, working or recreating near the Airpark. (Ord. 726 §2, 2002)
 - 17.88.020 Definitions. As used in this chapter:
- "Airpark" means the Scappoose Industrial Airpark. The Airpark utilizes a non-precision instrument runway, other than utility, that currently has visibility minimums greater than three-fourths statute mile. Over the planning period, it is possible that the visibility minimums could be reduced to three-fourths statute mile.
- "Airport" is the strip of land used for taking off and landing aircraft, together with all adjacent land used in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for existing airport uses.
- "Airport direct impact area" means the area located within five thousand feet of an airport runway, excluding lands within the runway protection zone and approach surface.
- "Airport elevation" is the highest point of an airport's usable runway, measured in feet above mean sea level.
- "Airport imaginary surfaces" are the imaginary areas in space and on the ground that are established in relation to the airport and its runways. Imaginary areas are defined by the primary surface, runway protection zone, approach surface, horizontal surface, conical surface and transitional surface.
- "Airport noise impact boundary" means areas located within one thousand five hundred feet of an airport runway or within established noise contour boundaries exceeding fifty-five Ldn.

"Airport secondary impact area" is the area located between five thousand and ten thousand feet from an airport runway.

"Airport sponsor" means the owner, manager, or other person or entity designated to represent the interests of an airport. For the Scappoose Industrial Airpark, the sponsor is Port of St. Helens.

"Approach surface" is a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surfaces. For the Scappoose Industrial Airpark:

- 1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of three thousand five hundred feet. If visibility minimums are reduced to three-fourths statute mile, then the approach surface would expand uniformly to a width of four thousand feet;
- 2. The approach surface extends for a horizontal distance of ten thousand feet at a slope of thirty-four feet outward for each foot upward; and
- 3. The outer width of an approach surface is three thousand five hundred feet at a distance of ten thousand feet from the end of the primary surface. If visibility minimums are reduced to three-fourths statute mile, then the outer width of the approach surface would be four thousand feet at a distance of ten thousand feet from the end of the primary surface.

"Conical surface" means a surface extending outward and upward from the periphery of the horizontal surface at a slope of twenty to one for a horizontal distance of four thousand feet.

"Department of Aviation" is the Oregon Department of Aviation, formerly the Aeronautics Division of the Oregon Department of Transportation.

"FAA" is the Federal Aviation Administration.

"FAA's technical representative" means (as used in this chapter) the federal agency providing the FAA with expertise on wildlife and bird strike hazards as they relate to airports. This may include, but is not limited to, the USDA-APHIS-Wildlife Services.

"Height" is the highest point of a structure or tree, plant or other object of natural growth, measured from mean sea level.

"Horizontal surface" is a horizontal plane one hundred fifty feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway and connecting to adjacent arcs by lines tangent to those arcs. For the Scappoose Industrial Airpark, the radius of each arc is ten thousand feet.

"Non-precision instrument runway" means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach has been approved, or planned, and for which no precision approach facilities are planned or indicated on an FAA-approved airport layout plan or other FAA planning document.

"Obstruction" means any structure or tree, plant or other object of natural growth that penetrates an imaginary surface.

"Other than utility runway" is a runway that is constructed for and intended to be used by turbine-driven aircraft or by propeller-driven aircraft exceeding twelve thousand five hundred pounds gross weight.

"Precision instrument runway" is a runway having an existing instrument approach procedure utilizing air navigation facilities that provide both horizontal and vertical guidance, such as an Instrument Landing System (ILS) or Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan or other FAA planning document.

"Primary surface" means a surface longitudinally centered on a runway. When a runway has a specially prepared hard surface, the primary surface extends two hundred feet beyond each end of that runway. When a runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. For the Scappoose Industrial Airpark, the width of the primary surface is five hundred feet. If visibility minimums are reduced to three-fourths statute mile, then the width of the primary surface would be one thousand feet.

"Public assembly facility" is a permanent or temporary structure or facility, place or activity where concentrations of people gather in reasonably close quarters for purposes such as deliberation, education, worship, shopping, employment, entertainment, recreation, sporting events, or similar activities. Public assembly facilities include, but are not limited to, schools, churches, conference or convention facilities, employment and shopping centers, arenas, athletic fields, stadiums, clubhouses, museums, and similar facilities and places, but do not include parks, golf courses or similar facilities unless used in a manner where people are concentrated in reasonably close quarters. Public assembly facilities also do not include air shows, structures or uses approved by the FAA in an adopted airport master plan, or places where people congregate for short periods of time such as parking lots or bus stops.

"Runway" is a defined area on an airport prepared for landing and takeoff of aircraft along its length.

"Runway Protection Zone" (RPZ) means an area off the runway end used to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape and centered about the extended runway centerline. The inner width of the RPZ is the same as the width of the primary surface. The outer width of the RPZ is a function of the type of aircraft and specified approach visibility minimum associated with the runway end. For the Scappoose Industrial Airpark, the RPZ extends from each end of the primary surface for a horizontal distance of one thousand feet. If visibility minimums are reduced to three-fourths statute mile, then the RPZ would extend from each end of the primary surface for a horizontal distance of one thousand seven hundred feet.

"Significant" means (as it relates to bird strike hazards) a level of increased flight activity by birds across an approach surface or runway that is more than incidental or occasional, considering the existing ambient level of flight activity by birds in the vicinity.

"Structure" is any constructed or erected object which requires location on the ground or is attached to something located on the ground. Structures include but are not limited to buildings, decks, fences, signs, towers, cranes, flagpoles, antennas, smokestacks, earth formations and overhead transmission lines. Structures do not include paved areas.

"Transitional surface" means those surfaces that extend upward and outward at ninety-degree angles to the runway centerline and the runway centerline extended at a slope of seven feet horizontally for each foot vertically from the sides of the primary and approach surfaces to the point of intersection with the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces which project through and beyond the limits of the conical surface, extend a distance of five thousand feet measured horizontally from the edge of the approach surface and at a ninety-degree angle to the extended runway centerline.

"Utility runway" is a runway that is constructed for, and intended to be used by, propeller-driven aircraft of twelve thousand five hundred pounds maximum gross weight or less.

"Visual runway" is a runway intended solely for the operation of aircraft using visual approach procedures, where no straight-in instrument approach procedures or instrument designations have been approved or planned, or are indicated on an FAA-approved airport layout plan or any other FAA planning document.

"Water impoundment" includes wastewater treatment settling ponds, surface mining ponds, detention and retention ponds, artificial lakes and ponds, and similar water features. A new water impoundment includes an expansion of an existing water impoundment except where such expansion was previously authorized by land use action approved prior to the effective date of this chapter. (Ord. 786 §5, 2006; Ord. 726 §2, 2002)

- 17.88.030 Imaginary surface and noise impact boundary delineation. The airport elevation, the airport noise impact boundary, the airport direct impact boundary, the airport secondary impact boundary, and the location and dimensions of the runway, primary surface, runway protection zone, approach surface, horizontal surface, conical surface and transitional surface shall be delineated for the Scappoose Industrial Airpark and shall be made part of the Official Zoning Map. The imaginary surfaces and the noise impact boundary are illustrated in the 2004 Scappoose Industrial Airpark Airport Master Plan (as amended August 9, 2006). All lands, waters and airspace, or portions thereof, that are located within these boundaries or surfaces, and are located within the city limits, shall be subject to the requirements of this overlay zone. (Ord. 786 §5, 2006; Ord. 726 §2, 2002)
- 17.88.040 Notice of land use and permit applications within overlay zone area. Except as otherwise provided herein, written notice of applications for land use or limited land use decisions, including comprehensive plan or zoning amendments, in an area within this overlay zone, shall be provided to the airport sponsor and the Department of Aviation in the same manner as notice is provided to property owners entitled by law to written notice of land use or limited land use applications.
- A. Notice shall be provided to the airport sponsor and the Department of Aviation when the property, or a portion thereof, that is subject to the land use or limited land use application, is located within the Scappoose city limits and within five thousand feet of the sides or ends of a runway.
- B. Notice of land use and limited land use applications shall be provided within the following timelines:

- 1. Notice of land use or limited land use applications involving public hearings shall be provided prior to the public hearing at the same time that written notice of such applications is provided to property owners entitled to such notice; and
- 2. Notice of land use or limited land use applications not involving public hearings shall be provided at least twenty days prior to entry of the initial decision on the land use or limited land use application.
- C. Notice of the decision on a land use or limited land use application shall be provided to the airport sponsor and the Department of Aviation within the same timelines that such notice is provided to parties to a land use or limited land use proceeding.
- D. Notices required under subsections A through C of this section need not be provided to the airport sponsor or the Department of Aviation where the land use or limited land use application meets all of the following criteria:
- 1. Would only allow structures of less than thirty-five feet in height;
- 2. Involves property located outside the approach and transition surfaces;
- 3. Does not involve industrial, mining or similar uses that emit smoke, dust or steam; sanitary landfills or water impoundments; or radio, radiotelephone, television or similar transmission facilities or electrical transmission lines; and
- 4. Does not involve wetland mitigation, enhancement, restoration or creation. (Ord. 726 §2, 2002)
- 17.88.050 Height limitations on allowed uses in underlying zones. All uses permitted by the underlying zone shall comply with the height limitations in this section. When height limitations of the underlying zone are more restrictive than those of this overlay zone, the underlying zone height limitations shall control.
- A. Except as provided in subsections B and C of this section, no structure or tree, plant or other object of natural growth shall penetrate an airport imaginary surface.
- B. For areas within airport imaginary surfaces but outside the approach and transition surfaces, where the terrain is at higher elevations than the airport runway surfaces such that existing structures and permitted development penetrate or would penetrate the airport imaginary surfaces, a local government may authorize structures up to thirty-five feet in height.
- C. Other height exceptions or variances may be permitted when supported in writing by the airport sponsor, the Department of Aviation and the FAA. Applications for height variances shall follow the procedures for other variances and shall be subject to such conditions and terms as recommended by the Department of Aviation and the FAA. (Ord. 726 §2, 2002)
- 17.88.060 Procedures. An applicant seeking a land use or limited land use approval in an area within this overlay zone shall provide the following information in addition to any other applications or requirements as listed within the Scappoose Development Code:
- A. A map or drawing showing the location of the property in relation to the airport imaginary surfaces. The Planning Department shall provide the applicant with appropriate base maps upon which to locate the property.

- B. Elevation profiles and a site plan, both drawn to scale, including the location and height of all existing and proposed structures, measured in feet above mean sea level.
- C. If a height variance is requested, letters of support from the airport sponsor, the Department of Aviation and the FAA. (Ord. 726 $\S 2$, 2002)
- 17.88.070 Land use compatibility requirements. Applications for land use or building permits for properties within the boundaries of this overlay zone shall comply with the requirements of this chapter as provided herein.
- A. Noise. Within airport noise impact boundaries, land uses shall be established consistent with the levels identified in OAR 660, Division 13, Exhibit 5. A declaration of anticipated noise levels shall be attached to any subdivision or partition approval or other land use approval or building permit affecting land within airport noise impact boundaries. In habitable areas where the noise level is anticipated to be at or above 45 Ldn, prior to issuance of a building permit for construction of a noise sensitive land use (real property normally used for sleeping or as a school, church, hospital, public library or similar use), the permit applicant shall be required to demonstrate that a noise abatement strategy will be incorporated into the building design that will achieve an indoor noise level equal to or less than 45 Ldn.
- B. Outdoor Lighting. No new or expanded industrial, commercial or recreational use shall project lighting directly onto an existing runway or taxiway or into existing airport approach surfaces except where necessary for safe and convenient air travel. Lighting for these uses shall incorporate shielding in their designs to reflect light away from airport approach surfaces. No use shall imitate airport lighting or impede the ability of pilots to distinguish between airport lighting and other lighting.
- C. Glare. No glare producing material, including but not limited to unpainted metal or reflective glass, shall be used on the exterior of structures located within an approach surface or on nearby lands where glare could impede a pilot's vision.
- D. Industrial Emissions. No new industrial, mining or similar use, or expansion of an existing industrial, mining or similar use, shall, as part of its regular operations, cause emissions of smoke, dust or steam that could obscure visibility within airport approach surfaces, except upon demonstration, supported by substantial evidence, that mitigation measures imposed as approval conditions will reduce the potential for safety risk or incompatibility with airport operations to an insignificant level. The review authority shall impose such conditions as necessary to ensure that the use does not obscure visibility.
- E. Communications Facilities and Electrical Interference. No use shall cause or create electrical interference with navigational signals or radio communications between an airport and aircraft. Proposals for the location of new or expanded radio, radiotelephone, and television transmission facilities and electrical transmission lines within this overlay zone shall be coordinated with the Department of Aviation and the FAA prior to approval. Approval of cellular and other telephone or radio communication towers on leased property located within airport imaginary surfaces shall be conditioned to require their removal within ninety days following the expiration of the lease agreement. A bond or other security shall be required to ensure this result.

- F. Limitations and Restrictions on Allowed Uses in the RPZ, Approach Surface, and Airport Direct and Secondary Impact Areas. The land uses identified in Table 17.88.1, and their accessory uses, are permitted (P); permitted under limited circumstances (L); or prohibited in the manner therein described (N). In the event of conflict with the underlying zone, the more restrictive provisions shall control. As used in this section, a limited use means a use that is allowed subject to special standards specific to that use. All regulation of uses within the RPZ, approach surface, and airport direct and secondary impact areas are limited to land areas within the city limits of Scappoose. Direct and secondary impact areas located outside of the city limits are regulated by the codes and ordinances of Columbia County. (Ord. 726 §2, 2002)
- 17.88.080 Water impoundments within approach surfaces and airport direct impact boundaries. A. Any use or activity that would result in the establishment or expansion of a water impoundment shall comply with the requirements of this section.
- B. No new or expanded water impoundments greater than or equal to one-quarter acre in size, individually or cumulatively, are permitted:
- 1. Within an approach surface or any lands located in the city limits that are within five thousand feet from the end or edge of a runway (areas within five thousand feet that are located outside of the city limits are regulated by Columbia County); or
- 2. On land owned by the airport sponsor that is necessary for airport operations. (Ord. 726 §2, 2002)

	Public Airport	Residential	Commercial	Industrial	Institutional	Farm Use	Roads/Parking	Utilities	Parks & Open Space	Golf Courses	Athletic Fields	sanitary Landiilis	Surface Mining	Water Impoundment	Wetland Mitigation
Location															
RPZ^1	L ²	N	N	N	N	P ³	L^4	L^5	L ⁶	L^7	N	N	N	N	N
Approach Surface 8	L ⁹	L ¹⁰	L ⁹	L ⁹	L ⁹	P ³	Р	L^5	Р	$L^{7/9}$	L ⁹	N	\mathbf{L}^{11}	N/L ¹²	L^{13}
Direct Impact Areas	P	L^{14}	L^{15}	Р	${f L}^{15}$	P ³	P	L ⁵	P	L ⁷	${ t L}^{14}$	N ¹⁶	\mathbf{L}^{11}	L^{12}	L ¹³

- 1. No structures shall be allowed within the Runway Protection Zone. Exceptions shall be made only for structures accessory to airport locations whose location within the RPZ has been approved by the FAA.
- 2. In the RPZ, public airport uses are restricted to those uses and facilities that require location in the RPZ.
- 3. Farming practices that minimize wildlife attractants are encouraged.
- 4. Roads and parking areas are permitted in the RPZ only upon demonstration that there are no practicable alternatives. Lights, guardrails and related accessory structures are prohibited. Cost may be considered in determining whether practicable alternatives exist.
- 5. In the RPZ, utilities, powerlines and pipelines must be underground. In approach surfaces and in airport direct and secondary impact areas, the proposed height of utilities shall be coordinated with the airport sponsor and the Department of Aviation.
- 6. Public assembly facilities are prohibited within the RPZ.
- 7. Golf courses may be permitted only upon demonstration, supported by substantial evidence, that management techniques will be utilized to reduce existing wildlife attractants and avoid the creation of new wildlife attractants. Such techniques shall be required as conditions of approval. Structures are not permitted within the RPZ. For purposes of this chapter, tee markers, tee signs,
- pin cups and pins are not considered to be structures.
- 8. Within 10,000 feet from the end of the primary surface of a non-precision instrument runway, and within 50,000 feet from the end of the primary surface of a precision instrument runway.
- 9. Public assembly facilities may be allowed in an approach surface only if the potential danger to public safety is minimal. In determining whether a proposed use is appropriate, consideration shall be given to: proximity to the RPZ density of people per acre; frequency of use; level of activity at the airport; and other factors relevant to public safety. In general, high density uses should not be permitted within airport approach surfaces, and nonresidential structures should be located outside approach surfaces unless no practicable alternatives exist.
- 10. Residential densities within approach surfaces should not exceed the following densities:
 - (A) Within 500 feet of the outer edge of the RPZ, one unit/acre.
 - (B) Within 500 to 1,500 feet of the outer edge of the RPZ, two units/acre.
 - (C) Within 1,500 to 3,000 feet of the outer edge of the RPZ, four units/acre.
 - NOTE: Distance located outside of the city limits of the City of Scappoose are regulated by Columbia County.
- 11. Mining operations involving the creation or expansion of water impoundments shall comply with the requirements of this chapter regulating water impoundments (See Section 17.88.080).
- 12. Water impoundments are prohibited within 5,000 feet from the end or edge of a runway within the city limits of the city (areas within 5,000 feet that are located outside of the city limits are regulated by Columbia County). See Section 17.88.080.
- 13. Wetland mitigation required for projects located within an approach surface or airport direct impact area shall e authorized only upon demonstration, supported by substantial evidence, that it is impracticable to provide mitigation outside of these areas. Proposals for wetland mitigation shall be coordinated with the airport sponsor, the Department of Aviation, the FAA, and wetland permitting agencies prior to the issuance of required permits. Wetland mitigation shall be designed and located to avoid creating a wildlife hazard or increasing hazardous movements of birds across runways and approach surfaces. Conditions shall be imposed as are appropriate and necessary to prevent in perpetuity an increase in hazardous bird movements across runways and approach surfaces. See Section 17.88.090 for best management practices for airports located near significant wetlands or wildlife habitat areas.
- 14. Within the transition surface, residential uses and athletic fields are not permitted.
 15. Within the transition surface, overnight accommodations, such as hotels, motels, hospitals and dormitories, are not permitted.
- 16. Sanitary landfills are prohibited within 10,000 feet of the end or edge of a runway. within 10,000 feet of a runway that are not located within the city limits are regulated by Columbia County.

- 17.88.090 Wetland mitigation, creation, enhancement and restoration within approach surfaces and airport direct impact boundaries. A. Notwithstanding the requirements of Section 17.88.080, wetland mitigation, creation, enhancement or restoration projects located within areas regulated under Section 17.88.080 shall be allowed upon demonstration of compliance with the requirements of this section.
- B. Wetland mitigation, creation, enhancement or restoration projects existing or approved on the effective date of this chapter and located within areas regulated under Section 17.88.080 are recognized as lawfully existing uses.
- C. To help avoid increasing safety hazards to air navigation near public use airports, the establishment of wetland mitigation banks in the vicinity of such airports but outside approach surfaces on areas regulated under Section 17.88.080 is encouraged.
- D. Applications to expand wetland mitigation projects in existence as of the effective date of this chapter, and new wetland mitigation projects, that are proposed within areas regulated under Section 17.88.080 shall be considered utilizing the review process applied to applications for conditional use permits and shall be permitted upon demonstration that:
 - 1. It is not practicable to provide off-site mitigation; or
- 2. The affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water discharge, and the area proposed for mitigation is located outside an approach surface.
- E. Wetland mitigation permitted under subsection D (above) of this section shall be designed and located to avoid creating a wildlife hazard or increasing hazardous movements of birds across runways or approach surfaces.
- F. Applications to create, enhance or restore wetlands that are proposed to be located within approach surfaces or within areas regulated under Section 17.88.080, and that would result in the creation of a new water impoundment or the expansion of an existing water impoundment, shall be considered utilizing the review process applied to applications for conditional use permits and shall be permitted upon demonstration that:
- 1. The affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water discharge; and
- 2. The wetland creation, enhancement or restoration is designed and will be maintained in perpetuity in a manner that will not increase hazardous movements of birds feeding, watering or roosting in areas across runways or approach surfaces.
- G. Proposals for new or expanded wetland mitigation, creation, enhancement or restoration projects regulated under this section shall be coordinated with the airport sponsor, the Department of Aviation, the FAA and FAA's technical representative, the Oregon Department of Fish & Wildlife (ODFW), the Oregon Division of State Lands (DSL), the US Fish & Wildlife Service (USFWS), and the U.S. Army Corps of Engineers (Corps) as part of the permit application.
- H. A decision approving an application under this section shall require, as conditions of approval, measures and conditions deemed appropriate and necessary to prevent in perpetuity an increase in hazardous bird movements across runways and approach surfaces. (Ord. 726 §2, 2002)

- 17.88.100 Nonconforming uses. A. These regulations shall not be construed to require the removal, lowering or alteration of any structure not conforming to these regulations. These regulations shall not require any change in the construction, alteration or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this overlay zone.
- B. Notwithstanding subsection A of this section, the owner of any existing structure that has an adverse effect on air navigational safety as determined by the Department of Aviation shall install or allow the installation of obstruction markers as deemed necessary by the Department of Aviation, so that the structures become more visible to pilots.
- C. No land use or limited land use approval or other permit shall be granted that would allow a nonconforming use or structure to become a greater hazard to air navigation than it was on the effective date of this overlay zone. (Ord. 726 §2, 2002)
- 17.88.110 Avigation easement. Within this overlay zone, the owners of properties that are the subjects of applications for land use or limited land use decisions, for building permits for new residential, commercial, industrial, institutional or recreational buildings or structures intended for inhabitation or occupancy by humans or animals, or for expansions of such buildings or structures by the lesser of fifty percent or one thousand square feet, shall, as a condition of obtaining such approval or permits, dedicate an avigation easement to the airport sponsor. The avigation easement shall be in a form acceptable to the airport sponsor and shall be signed and recorded in the deed records of Columbia County. The avigation easement shall allow unobstructed passage for aircraft and ensure safety and use of the airport for the public. Property owners or their representatives are responsible for providing the recorded instrument prior to issuance of building permits. (Ord. 726 §2, 2002)